

Publishers :
GAUTAMA BROTHERS & Co., LTD.,
CAWNPORE.

Printers :
THE PIONEER PRESS LTD.,
LUCKNOW.

under the chairmanship of Lord Sankey to report on the questions affecting the coal industry. At the same time wage conflicts were in progress notably in the textiles and railways. But the effectiveness of the labour offensive was diminished by *lack of unity*, the miners favoured a general strike and direct action but the Trade Union Congress preferred political action.

In 1921, when retail prices began to fall the counter-offensive of the employers began. The national wage agreements for the mining industry were broken. The miners appealed for aid to the Triple Alliance (Railway men and Transport workers) but on "*Black Friday*" (15th April 1921) the Alliance fell apart and miners were left alone to struggle on. Later in the year, the national wage agreements in agriculture were destroyed and wages there fell rapidly. At the same time there was a determined attack on the Trade Boards.

In the political struggle, however, Labour was successful in the general election of 1924 and with the Liberal's aid was placed in office for the first time. But it went out of office after a short period and with a further deterioration in industries the employer's offensive was resumed.

DEDICATED

TO THE MEMORY

OF

MY LATE WIFE

nomies may be obtained in poorer production and valuable bye-products utilized.

Even before the depression, the industry was trying to solve the three technical problems of deeper working, mechanical haulage and ventilation. To overcome the difficulties and costs of deeper working mechanical operations are essential. Metal cages, wire rope and the steam engine to pump out water and winding up coal, and steam jets to propel air through the shafts, and mechanical conveyors have been introduced. The depression still further strengthened all the forces that have been causing a decline in the industry so that it is highly improbable that this industry will enjoy again a period of progress similar to that of pre-war years. Science may discover new uses for coal but no forecast can yet be made to hold out any prospects of a revival of the demand for coal to pre-war levels.

Meanwhile, important changes have been going on in the reorganisation of the industry. The hours of work were raised from 7 to 8 in 1926 but again restored to 7 in 1930. In 1930, the Coal Mines Act was passed to regulate the production and control sales. It also provided for the creation of a Coal Mines Reorganisation

PREFACE

The present work was first published in 1939 in the form of six booklets which were later on bound together and appeared as the 'Modern Economic Development of England and India Part I.' It grew mostly out of my class-notes and those of Prof. K. S. Bhatnagar of the local S. D. College. It was mainly with a view to meet the genuine need of a suitable text-book, which we have sorely felt during our long¹ experience of teaching, for the B. Com. students of the Agra University that we undertook the enterprise; and, later on, it was decided that I should complete the syllabus of the B. Com. & M.A. Courses in Modern Economic Development of England and India by writing a companion volume on the Economic Development of India on similar lines. The present edition of the book is entirely one man's task and the responsibility is entirely mine for its defects and shortcomings. The book has been completely overhauled, recast, revised and made up-to-date. I shall be grateful to the teachers of the subject in the various Universities and Colleges if they offer their valuable suggestions for the improvement of the book.

There is no dearth of standard volumes on the Economic History of England written by great masters of English history and I cannot claim the least originality in the preparation of this volume except the re-arrangement of the matter in a suitable form to be easily intelligible to an average student of an Indian University. My only excuse for adding this volume is that the entire matter necessary for the full course is neither available

at one place or in one volume nor in a coherent and comprehensive style. Moreover, the standard volumes are very costly for a student of ordinary means. The teachers too have to consult a number of books, prepare notes and dictate them to their classes. I am confident the present work will amply satisfy the needs of both teachers and students of the subject in our universities.

In the preparation of the present book I have consulted a number of standard works by celebrated masters of English history to whom I most gladly acknowledge my deep debt. I have freely quoted from their works as also from blue books in support of my thesis and shown my sources of information at the proper places. To Prof. Kali Shankar Bhatnagar of the local S. D. College I owe a debt of gratitude, as one of his most favoured and favourite students, not only for his inspiring me with his deep knowledge of history, but also for his kindly reading and correcting the Mss. and the proofs of the last publication at a great personal sacrifice, and for his permission to utilize the materials of his paper on the Post-War English Agriculture and Agricultural Policy after 1921 with, of course, the necessary and suitable additions and modifications of my own to make the matter more comprehensive and up-to-date. I am also thankful to Prof. Kalka Prasad Bhatnagar, Dean of the Faculty of Commerce, Agra University, for his kind words of encouragement in the preparation of this volume which he feels is 'a pioneer work.'

D. A.-V. College,
Cawnpore,
11th Nov., 1941.

C. P. SRIVASTAVA.

CONTENTS

	Page
Chapter I—Introductory (Physical Environment & Economic Development) ..	1
" II—Introductory (Social Environment & Economic Development) ..	21
" ✓ III—The Economic Foundation of England (The Manorial System) ..	41
" IV—The Economic Foundation of England (Mediæval Trade and Industry)	62
" V—Economic Organisation of England in 1760	95
" ✓ VI—Agricultural Revival in the 18th century	118
" ✓ VII—English Agriculture (1850-1914) ..	139
" ✓ VIII—English Agriculture and Agricultural Policy in recent years ..	158
" IX—The Industrial Revolution ..	194
" X—Commercial Revolution in England	223
" XI—The Golden Age of British Capitalism	239
" XII—Leading British Industries since 1875	249
" XIII—The Great War and British Trade & Industry	298
" XIV—Co-operation	317
" XV—Labour Problems	346
" XVI—Social Insurance	359
" XVII—Industrial Disputes	374
" XVIII—Growth of Trade Unionism ..	386
" XIX—Transport (Roads, Canals and Railways)	429
" XX—Transport (Growth of Shipping)	497
" XXI—Fiscal Policy	534

on its economic development. Similarly the quantity and the quality of the population, its racial peculiarities, its social and religious institutions, its legal and political systems and the system of public health, sanitation and education all exercise a controlling influence on its economic prosperity. It has been noticed that people in the midst of the bounteous gifts of nature remain backward economically because they have failed to exploit their rich natural surroundings. Of these two factors of economic development, man is the active agent and therefore of greater importance. A comparison of the free gifts of nature and the qualities and peculiarities of their populations brings out clearly the fundamental difference in the economic outlook and prosperity of *England* and *India*. In our country we have failed to take the fullest and the best advantage of our rich natural environment and it has become a truism to say that "India is a rich country inhabited by the poor."¹ A study of the following pages will bring out clearly the reasons for this paradoxical statement.

Land i.e. the sum total of the elements and forces supplied by nature freely and voluntarily to aid man in the production of wealth, is the basis

1. *Jathar & Beri*; Indian Eco. Vol. I p. 37.

over the forces of nature. In the primitive stages of economic life, Nature's gifts are everything for the support of man, but as he advances in civilisation he gradually shakes off his extreme dependence on the bounty of nature. But even in the highest stages of economic life natural resources are of fundamental importance. *England*, for example, owes her industrial and commercial supremacy in no small measure to her favourable geographical location in the centre of the land hemisphere, to the insularity of her position, to her bracing climate, to her indented coastline and natural harbours, her navigable rivers and fertile soil and to the close proximity of her iron and coal mines. Similarly, the agricultural prosperity of the *Indo-Gangetic* plains is the result of natural gifts—the wide expanse of level and fertile lands, the numerous rivers that deposit rich silt in their valleys when in flood, the facilities for irrigation that they provide and the helpful climate that they enjoy. There is, however, a limit to the control of man over nature and ultimately he must depend upon her gifts "in land and water, in air and light and heat."²

2. *Marshall: Principles of Economics* p. 138.

In this physical environment, *climatic conditions* are of cardinal importance. Their control on the economic activities and occupations of man can hardly be overemphasized. The physique, the mode of living, dress and habits, the food and raw materials, the flora and fauna, and national temperament and productive efficiency of the labour force—all these are very powerfully moulded by climatic conditions. Prof. Seligman, while dealing with the foundations of economic life in his *Principles of Economics* remarks, "The rigour of the Arctic regions and the bounty of the tropical zones are alike hostile to economic progress. Where the food supply is scanty and the low temperature benumbing, human resources are taxed to the utmost in securing the bare wherewithal of life, and no surplus energy is left to accumulate a store of wealth. Where, on the other hand, nature pours out her treasures with lavish hand, and the torrid heat enervates and lulls into lethargy, scarcely any activity is needed to procure subsistence, and little is ordinarily exerted for other purposes. Although we have had civilisation in hot countries, the real home of the greatest economic progress has always been in the temperate zones, where man is goaded out of his natural

laxness by the prick of want, and lured on to effort by the hope of reward." Not only this, the alternations of heat and cold exercise a great influence and determine the nature and quality of the product, and influence the capacity of the population for hard, continuous and strenuous work. The sufficiency or otherwise of sunshine and moisture also determines the forestry conditions and the economic utility of the rivers. But in a semi-arid region the regular and laborious contest with an unbountiful nature will create in the individual a spirit of self-reliance, independence, initiative and enterprise. Thus, climate is greatly responsible for national temperament and character.

The *British Isles* lie in the north-west of Europe between 50° and 60° N. latitudes. England therefore lies in the temperate zone, and, as such, she enjoys an equable and mild climate. This is favourable to hard and continuous work throughout the year and, on account of this regularity of work and its continuity, the efficiency of the labour force of England is very great. The bracing and salubrious climate of the islands stimulates active exertion, its comparative mildness in winter causes little or no interruption of labour in any part of the country, except in agriculture, and its relative

freedom from heavy snowfalls does not hinder communications; and it seems to be unfavourable to fungi and insects which cause pestilence to the crops. It has a very bracing effect on the health of the people, and on their physique. The relatively longer span of life and the lower death rate of England as compared to India are partly the result of its climate. The niggardliness of nature as compared to the tropical and subtropical belts is also a boon in disguise. It goads the Englishman to a vigorous attack on nature, makes him enterprising and adventurous, thrifty and industrious. Sheer necessity compels him to plan the bold mastery of nature and makes him self-reliant in thought and character.

Similarly, we find in *India* that the vagaries of the monsoon, the unequal distribution and inconsistency of the rains with differences in humidity have most powerfully influenced vegetation. The production of jute in Bengal, of tea in Assam, of wheat in the Punjab and the U.P., of rice in Bengal, Bihar, the eastern districts of U.P. and the coastal strips, and of sugarcane in Bihar and U.P., is largely determined by climatic conditions. India lies in the tropical and subtropical belt and has a variety of climate in the different parts.

There are usually three seasons—hot, rainy and cold; this, while very favourable to agriculture, also interferes with the continuity of work to some extent. It is impossible to carry on work on the farms in the scorching heat of the sun in summer or in torrential rains in the wet season. The humid weather during the monsoon engenders lassitude and lethargy, makes us stay-at-home, and lack of regularity and constancy in work spells inefficiency in our labour force.

Our climatic conditions—the scorching heat of the summer followed by the copious rains—cause a mushroom growth of mosquitoes, insects and fungi which play havoc with both vegetable and animal life and cause substantial economic losses to the country. Our vitality and stamina are sapped by a host of epidemic and endemic diseases. The extreme dependence of our parent industry—agriculture—on the vagaries of the monsoons renders it a very precarious industry and makes it a virtual “gamble in rains.” Our climate is also responsible to some extent for our high death rate and for our shorter span of life.

The greatest influence of the natural environment in *India* is to be seen, however, on the character of her people. It has made them imitative

without being inquisitive. Relatively to the Western peoples, they lack in self-confidence, industry and enterprise, and in effective action and decision. The wide expanse of the country and violent manifestation of natural phenomena produce an awe and a dependence on nature that are the parents of the almost universal trust in destiny and luck. The big mountains and rivers of the country impress upon them the awfulness of nature and their own insignificance and impotence in the face of nature which results in improvidence and inertia. They lack in initiative and enterprise and have a passive outlook on life rather than that verve and energy which have contributed in no small degree to the material progress of England. However, this sweeping generalisation and condemnation of our national character by the western writers is not borne out by our past achievements not only in the domain of arts and crafts but also in science, philosophy, mathematics, industrial arts, ship-building and colonisation. There is no latent, inherent, natural defect in our national character which precludes us from material advancement and prosperity. There is nothing in our character which is irremovable. India was famous for the

wealth of her rulers and for the high artistic skill and workmanship of her craftsmen even before the Christian era. Even at a much later period when traders from the West made their first appearance in India, the industrial development of this country was at any rate not inferior to that of the more advanced European nations.³ In fact our ancestors were very enterprising and adventurous. They were great ship-builders and colonisers. They had colonised Bali, Java, Sumatra and other important islands of the Malay Archipelago.

While climate influences the earth's surface and in various ways controls the economic activities of man, *geological formation* plays an important role in the economic development of a country. In the first place, we have the fundamental fact of altitude which explains the variety of climate, of vegetation, of all natural products, in the different provinces of India. In the second place, the chemical and physical properties of the soil determine its original fertility upon which the productiveness of an area for any crop primarily depends. But even more important than the surface of the Earth is what lies beneath it. The subsoil and its

3. Industrial Commission 1916.

richness in mineral deposits exerts a commanding influence. In ancient times copper and tin were important factors in the advancement of civilisation. Even today with a highly evolved system of exchange the existence of copper, tin, iron, coal, gold, silver, lead, diamond, and oilfields is one of the chief factors in the economic development of any country.

The industrial supremacy of *England* rests to a great extent on the close proximity of her iron and coal deposits which are very good in quality and large in quantity, while the industrial backwardness of India may be ascribed, among other reasons, to the absence of well-distributed coal deposits of a good quality and the distance of iron deposits, even in centres where coal is found, from them. The output of Indian coal does not exceed 1% of the world's total while that of iron ore hardly reaches a two-hundredth part. If a country is rich both in its soil and subsoil its economic prosperity is based on very firm foundations as in the case of the U.S.A.

The character and extent of the *vegetable and animal life* depend upon the climatic and geological conditions. *India* produces a very large quantity of wheat, rice, pulses, millets, sugar, oilseeds,

cotton, jute, tobacco, tea and coffee, etc. Agriculture is her premier industry and this is chiefly due to the rich alluvial soil of the riverine northern and coastal plains and her mighty rivers and irrigation facilities. They maintain some of the world's highest densities of population. In the Indo-Gangetic plains on account of the smooth and clayey surface it is very easy to construct rails and roads and canals but it is very expensive to maintain them; while in the Deccan plateau, on account of the hilly and rugged surface, it is very difficult to build and lay out roads and canals but the cost of maintenance is less as compared to the northern plains. On the other hand, the rivers of the north usually flow very slowly and form deltas, hence they are very useful for irrigation and navigation by small boats and steamers to long distances; but the rivers of the Deccan flow into deep cut gorges very swiftly, forming cataracts, and get shrivelled up or dried in the summer. Hence, they are neither navigable nor very useful for irrigation except near their deltas in the eastern coastal strips. The rivers of the north are perennial as they are fed by the Himalayan snows in the summer. They are usually flooded in the rainy season, and while they thus occasionally destroy the crops, they

leave behind very rich deposit of silt and renew the soil' and thus make it very alluvial, porous, and productive. In fact, if the Himalayas had not been there, the whole of northern India would have been a desert. They deflect the monsoons and cause them to yield rain to the plains, prevent them from going beyond India and protect it from the northerly cold bleak and dry winds. Not only this, they abound in evergreen forests and provide an immense quantity of timber for constructional purposes, slippers for railways, and are responsible for a number of forest industries.

In *England* the area occupied by unproductive hills and moors is very small and more than three-fourths of the entire area of land is under crops or grass or fallow. Only $4\frac{1}{2}\%$ of the surface is occupied by forests or woods. The hills and mountains of England are mostly in the north and west, but they are also fit for sheep pastures. The population in this area is very scanty except in those areas where manufactures are carried on. The south-east covered with chalk hills and downs has a very poor soil for agriculture. But these high grounds do not interfere with the facilities for locomotion because they are not a continuous chain. On all

sides there flow down from the hills rivers which are navigable to a greater or less length. The low-lying central and eastern plains are watered by longer and slowly moving rivers with estuaries. They are very easily navigable. These plains constitute the rich farming areas of the country. The utility of these rivers for navigation has been further increased by a network of canals whose construction is not very much interfered with by these hills. They have thus been very important in the development of English industry and commerce. They are especially important for the carriage of bulky goods like mineral. *England* is, however, able to produce food only for a part of the year and for the rest she has to depend on foreign supplies, whereas, *India* normally produces food not only for herself but exports a large quantity of food stuffs and other primary products to foreign countries. However, *England* is very rich in her subsoil wealth, especially in coal, iron, lead, copper and tin which are found in her mountainous or elevated regions. Coal is found in the greatest abundance in the north-west and it has been the principal foundation of her great industrial and commercial development.

India produces annually an average of twenty

million tons of coal. It is of a poor quality and is not very evenly distributed. Bombay, for example, finds it more advantageous to import coal from the province of Natal in South Africa than to import it from the Gondwana districts of Bihar and Orissa. She also produces iron and has a virtual monopoly of manganese and mica and produces a large quantity of wolfram, cement and saltpetre and pottery clays. Some gold is also found in Mysore but she is very deficient in petroleum. However the deficiency in coal and other sources of motive power is more than made up by her vast resources in white coal, that is, electricity, opportunities for generating which are unparalleled in the Himalayas and the Western Ghats. But so far the initial cost of outlay and the seasonal character of the rainfall have stood in the way of its being fully utilized. Recently, however, rapid strides have been made in this behalf. The mineral deposits of the country are adequate for most of the so-called 'Key' industries except for those that require vanadium, nickel and molybdenum.⁴

Lastly, we have to take into account the *geographical location* which is an important factor when commerce has developed. The nearness to

4. Industrial Commission 1916.

sea, the possession of safe, ample and commodious harbours and ports, navigable rivers and an indented coastline with a central position have been of signal importance in the maritime supremacy and the economic development of countries. For the purposes of commerce and trade *India* is favourably situated. She possesses a coastline of over 5,000 miles and is situated in the middle of the continent of Asia and almost at the centre of the eastern hemisphere. Most of her large rivers are navigable for great distances. Sea-routes radiate in all directions to all the continents and on the North-west frontiers caravan routes connect her with the Iranian plateau. But she suffers from one serious defect : the coastline except on her western sea board is very regular and unindented and there is a paucity of natural harbours. The only important harbours are Karachi, Bombay, and Goa on the west coast; and Madras, Vizagapatam, Calcutta, and Chittagong, on the east. This is why six-sevenths of the foreign trade of the country is confined to the five ports of Karachi, Bombay, Madras, Calcutta, and Rangoon. This deficiency can be remedied by dredging but it involves a very heavy initial outlay.

On the other hand, *England* is much better

situated with regard to commerce and shipping. She is in the centre of the land hemisphere, is an island having a large number of natural harbours; her rivers, unlike that of our country, form estuaries and, therefore, are navigable for long distances, her coast line is so much indented that there is hardly any place which is far away from the sea. The abundance of these natural harbours and navigable rivers has made sea-life an innate habit of the people and has fostered commercial intercourse with all parts of the country and abroad and provided accommodation for shipping. Even the composition of the English nation has encouraged a sea-faring spirit. The successive invasions of the Romans, the Saxons, the Danes, and the Normans and their subsequent assimilation with the natives has led to the growth of the sea-life and commercial enterprise, because these races were great sailors and navigators.

This broad survey of our physical environment brings out clearly that our country abounds in rich natural resources (vegetable, animal, mineral and power resources). What is needed is initiative, enterprise, business skill, capital, and government co-operation to rouse and exploit the dormant possibilities of material advancement. Nature has

been in fact very bountiful in bestowing her gifts lavishly, but man has failed to play his part. It is no wonder that the country is so rich but the people are so poor. As Justice Ranade, that shrewd and enthusiastic advocate of industrialism and the father of Indian Economics, put it "Natural aptitude, undeveloped and unlimited resources, peace and order, the whole world open to us, our marvellous situation as the emporium of all Asia—these priceless advantages will secure success, if we endeavour to deserve it by striving for it."

Her physical environment has been "of immense influence on the destinies of *England*. Her position was far on the outskirts of the world as it was known to ancient and mediæval times and England played a correspondingly inconspicuous part during those periods. In the habitable world as it has been known since the 15th century, on the other hand, that position is a distinctly central one, open alike to the eastern and the western hemisphere, to northern and southern lands."

"Her situation of insularity and at the same time of proximity to the Continent laid her open to frequent invasion in early times, but after she

secured a navy it made her singularly safe from subjugation. It made the development of many of her institutions tardy, yet at the same time gave her the opportunity to borrow and assimilate what she would from the customs of foreign nations. Her separation by water from the Continent favoured a distinct and continuous national life, while her nearness to it allowed her to participate in all the more important influences which affected the nations of central Europe.”⁵

On account of these natural advantages she has developed into the greatest maritime power of the world, and this geographical location has made London the greatest emporium of the world as a whole. The entrepot trade is one of the most profitable occupations of the English nation. This is because she can reach all those parts of the world which are accessible by sea, on account of her central position.

The geographical location of England favours her economic development in more ways than one. “In the first place, the ‘silver and streak’ is a natural bulwark of the highest value. It enables the kingdom to place its chief reliance for defence upon the navy, which makes a much less heavy

5. *Cheyney*: Industrial and Social History of England, p. 2.

drain upon the working population than the vast armies which continental nations are obliged to train and keep on foot. Secondly, it is of great importance to British commerce that our islands occupy a somewhat central position among the nations that carry on a great commerce at the present day.”⁶

INTRODUCTORY

CHAPTER II

Social Environment and Economic Development.

The economic development of a country is very powerfully affected by its social and religious institutions. History bears testimony to the fact that religious and social motives have been great motor forces in economic activity. In India, for example, we find that the organisation of village communities, the system of land tenure, the mobility of labour, individual initiative and enterprise, and the occupations of the people have been very profoundly influenced by two very fundamental institutions of Indian society *viz.* the *caste system* and the *joint family*. These together with the *Laws of Inheritance and Succession* constitute the institutional bases of Indian economic life.

Religion pervades every sphere of life in India and tends to engender rigid traditionalism and conservatism.¹ The problem of stimulating material progress is greatly accentuated in India by the prevailing religious beliefs and the peculiar social organisation to which they have given rise. There is an excessive emphasis on the spiritual

1 *Vera Anstey*: Eco. Dev. of India.

and the ceremonial than on the material side of life. Religious influence on economic potentialities persists even today. The outstanding result of historical events and the religious and social circumstances surrounding them has been the peculiarly rigid social stratification which has arisen out of the caste system. This social stratification with its detailed control over the social and economic activities has become an apparently irremovable fetter on material progress. Agricultural practices have been influenced very much by the prevailing notions of *Ahimsa*. Very substantial losses are caused by the pests, fungi, rats and rabbits, etc., but the average cultivator does not like to use insecticides to kill them. Similarly in the use of fertilisers and manures he is reluctant to use bone meal or fish or human excreta. An enormous loss is also caused by the maintenance of old and useless cows and bullocks. The diet of the Indian peasant is vegetarian. Similarly the profitable occupation of poultry farming is not at all undertaken by a large majority of cultivators here on account of their religion. The entire outlook on life is not characterised by that instinctive and persistent urge for material prosperity that marks the West.

However, it is not fair to lay all the blame at the door of the religions of India for the economic backwardness of its people. Religion has no doubt influenced very powerfully the beliefs and practices of the people but the reasons for their backwardness are to be sought elsewhere in the long enduring political and economic subordination of the country and the chaos and anarchy that prevailed in the 18th and the first half of the 19th centuries.

The characteristic social and religious institutions which have been mentioned above have moulded the various aspects of our economic life. "The sociological life of the people has determined in India systems of land tenure, the organisation of the village life. . . and the joint family and the caste system have regulated from times immemorial the rights of the individual as a member of the family, as a member of society, and as a member of the gild or trade to which he was attached by birth."²

Caste has been defined as a "collection of families or group of families bearing a common name which usually denotes or is associated with

2. *Chatterji*: Indian Economics, p. 80. quoted by Jathar and Beri.

a specific occupation, claiming common descent from a mythical ancestor, human or divine; professing to follow the same calling; and regarded by those who are competent to give an opinion as forming a single homogeneous community. A caste is almost invariably endogamous in the sense that a member of the large circle denoted by the common name may not marry outside that circle but within this circle there are usually a number of smaller circles, each of which is also endogamous. Thus, it is not enough to say that a Brahmin at the present day cannot marry any woman who is not a Brahmin, his wife must also belong to the same endogamous division of the Brahmin caste.” “Birth determines irrevocably the whole course of a man’s social and domestic relations and he must through life eat, drink, dress, marry, and give in marriage in accordance with the usages into which he was born.”³

The special features of the caste system, therefore, are that it divides society into so many segments or watertight compartments, lays down a social hierarchy, restricts dining and social intercourse to the members of the same *Goitra* as also

3. Imperial Gazetteer of India Vol. I. p. 311 quoted by Jathar and Beri.

the choice of marriage, provides certain religious privileges to the different sections and imposes a number of very irritating and unjust disabilities on the so-called untouchables, and limits the choice of occupations. Birth or heredity decides the occupations.

As regards the origin of the caste system there are very conflicting views. Some people say that it is functional *i.e.* it is an extended application of the principle of division of labour. Some aver that it is racial while others argue that it is sectarian. This controversy, however, is only of an academic interest and need not detain us here.

Caste has had very important economic consequences. It allows birth to determine the occupation of man, and prevents that correspondence between aptitude and work which is necessary for the efficiency of labour. It checks the development of individual initiative and enterprise, puts a premium on mediocrity and a discount on originality, stereotypes knowledge and craftsmanship, and tramples upon inventiveness and genius. The family, the caste and the guild or the panchayat, bind down every individual to the traditional methods of produc-

tion. The greatest disadvantage of the caste system from the national point of view lies in its division of society into watertight compartments which engenders a fissiparous tendency and checks the spirit of co-operation and comradeship. The touch-me-not taboo hinders the development of a national united front. That the caste system in its present form has outgrown its utility and is the curse of Indian economic life requires no arguments. In olden times it played a very useful part in maintaining purity of the racial stock and allowed society to organise itself for economic, social, religious and administrative services. In its original form, however, it had an extended application of division of labour and the principles of specialisation and in the same form it is found today in every society. But the Hindu society divided into numerous subcastes, each endogamous and believing in pollution being carried by touch, is to be found in India alone. As a result of this several occupations are oversupplied with labour while others suffer from a paucity of it. The competitive spirit and individual ambition and initiative are crushed.

The chief advantages claimed for the caste

system are that it preserves purity of the racial stock, brings about a collaboration of races and co-operation of cultures, and has made for the stability of the Indian society. The division of labour which it implies develops economic strength and efficiency. It provides a hereditary system of technical education and the reputation of the father and the inheritance of his custom gives a sure start in life to the beginner. It has fostered art and industry and has preserved the wonderful mechanical skill and dexterity of the handicraftsman. It provides for mutual help in times of need and adversity and for the harmony of interests. It trains apprentices and to that extent obviates the necessity of opening technical schools; while the caste *panchayats* regulate wages and the standard of workmanship and shelter the individual workman against unfair competition. It acts as a mutual benefit society or a philanthropic body, a trade union or a club.

However, all these advantages are more than counterbalanced by its grave disadvantages which may be summarised as below: The system is very rigid and unprogressive; it lacks adaptability and discounts initiative and improvements or inventions. It is a dead weight on advancement

and progress, occasionally a vast engine of oppression and intolerance, and a force making for social and political disunity and weakness. Its endogamous character is said to cause racial degeneration and is responsible for a lack of equilibrium in the marriage market, for heavy dowries, for suicides and infanticide. There is a lack of correspondence between aptitude and function, immobility of labour and capital, and hindrance to large scale production. It is opposed to equality and places a stigma on manual labour.

As one writer puts it : "The caste system of India largely organised on occupational basis, is a great co-operative system indeed. It recognises the great truth that the progress of a large body of people can best be achieved by grouping them and arranging that each group shall look to the needs of its own members. The castes thus function as co-operative credit societies, where the richer members give loans to the needy on personal security, as co-operative stores, where lower prices are charged for articles supplied to caste-brethren, as trade unions, employment bureaus, arbitration courts, and so forth and group-progress thus achieved is reflected in national progress. But the misfortune is that the spirit died away

and the framework of the caste system remains, as a lifeless carcass; all the primary functions have disappeared and the incidental characteristic of the caste system—marriage within the group—has become the leading, the only feature. Our co-operative groups have become mere endogamous groups; membership by choice has gone and membership by birth has come; brotherhood has been replaced by indifference if not hostility and jealousy; assistance to one another has been replaced by harassment and harmony has given place to feud.

“Many people in spite of these defects, try to restore the sense of brotherhood and take away the endogamous character of the caste system by a process of integration and widening of the circle.”

The impact of Western civilisation and Western education, and the railways are making very rapid inroads into it and are breaking it up. The social reform movement initiated by a gallant band of reformers in all parts of the country and the removal of untouchability and the uplift of the depressed classes organised by Mahatma Gandhi are also helping to break the rigidity and the tyranny of the system. How-

ever, it is still dominant in rural areas where ignorance and conservatism rule supreme. The only remedy for it lies in a widespread propaganda through education and social reform.

Another peculiarity of the Indian society is its *joint family system*. The undivided Hindu family is joint as regards property, food, worship and it is the foundation of Hindu law as regards marriage, adoption, maintenance and laws of inheritance and succession. The origin of the joint family is to be traced in common kinship, common religion, and common social tradition and economic conditions. The difficulties of communication and travel in the past and lack of scope for the development of differential ability in a society ridden by custom, tradition and status have played their own part in the growth and the persistence of the system.

The eldest male member of the family is regarded as a trustee administering the property of the family and regulating its affairs for the general material and spiritual welfare of its members, and is empowered to do anything calculated to achieve this end. The earnings of all the members are thrown in the common fund. Every one earns according to his capacity

and receives according to his needs. Thus, it is an almost socialistic institution though with a distinction.

The joint family system has a number of very good points to commend it, but it also suffers from a host of disadvantages. It fosters in the individual members of the family a spirit of discipline, sacrifice, obedience and reverence and discourages selfishness. Nobody is a victim to a lack of subsistence as the orphans, the aged, the infirm, and the unfortunate widows are all looked after and provided with the necessities of life. It engenders a spirit of fellow-feeling, love and benevolence, and provides for the nursing of the sick and food for the unemployed. There is no necessity of an elaborate system of poor relief and old age pensions as there is in the case of England. It also leads to a simple division of labour in the family for domestic work and effects a great economy in consumption by avoiding duplication of furniture, establishment, and equipment. It makes a small income go a long way. It avoids excessive fragmentation and subdivision of land.

However, there is an absence of correspondence between reward and effort and of an

economic incentive. It encourages drones and parasites who lack in self-respect and sense of responsibility. It prevents the development of individuality, initiative and enterprise. It discourages accumulation of capital and large scale enterprise by making it difficult to save and accumulate. Finally, by developing an attachment to the hearth and home and for one's own kith and kin it makes the people stay-at-home and hence fosters immobility of labour, and with the intensified struggle for existence in these days when wants have multiplied, among the middle classes especially, the commendable spirit of give and take has given way to uncompromising assertiveness, discontent and squabbles. It has become a curse in some respects. The development of the means of communication and transport by making it possible for people to move in search of employment outside their villages and by intensifying foreign competition which has destroyed the cottage industries and the family occupations has played a very important part in breaking the old family ties. And the western system of education and law have also influenced it in the same direction.

The law of inheritance and succession as pointed

out above has been very much influenced by the institution of the joint family. Joint ownership of land and property is the rule in India while absolute, unrestricted ownership is the exception. "Individual property is the rule in the West, corporate property is the rule in the East."⁴ In England, under individualism, the ownership of land is independent, single and unrestricted. In England the law of Primogeniture holds good under which the property is inherited by the eldest son and the younger sons have no share. They have to eke out an independent living for themselves. In very exceptional cases this principle of the eldest son inheriting the property of the father is found in India. In the States the throne or sovereignty descends to the eldest male member.

There are two systems in India so far as the inheritance and succession to property is concerned. They are the *Mitakshara* and the *Dayabhag* systems. The latter prevails mostly in Bengal. Under the first system sons are joint owners with the father, and no inheritance takes place after death of the father unless partition is demanded. Under the *Dayabhag* system on the

4. *Mayne*: Hindu Law and Usage p. 305.

other hand sons are owners only after the death of the father. Succession in this system takes place on the principle of survivorship. Partition is independent of death though as a general rule it takes place after the death of the father. Males in either case get a preference. In either case the father is the uncontrolled manager; the difference is only with regard to the ownership and therefore in inheritance and succession.

Our laws of inheritance and succession are based on the principles of equality and distributive justice; every male member gets something to start with in life. Under the English system, however, the privilege of inheritance is denied to the younger sons and they have nothing to start with in life. It makes them therefore more adventurous and enterprising and self-dependent. It is perhaps because of this that the average English family consists of the husband, the wife and the children. There is no herding together of two to three generations of people in the same family as it obtains in our country. Secondly, the laws of inheritance and succession in our country encourage a stable rural society of peasant proprietors carrying on a small scale subsistence farming with intensive cultivation:

whereas in England the same laws encourage capitalistic farming as a commercial undertaking and concentrate the ownership of land among a small number of people.

However, this widespread distribution of property in India discourages large scale enterprise and makes for a low standard of living, poverty, and indebtedness. It prevents a commercialisation of agriculture and causes a good deal of loss to the cultivators as they are very small units and cannot secure the economies of large scale dealings in the sale of their produce and purchase of their requirements. But the greatest harm caused to agriculture in our country by these laws is the excessive subdivision and fragmentation of holdings. On the partition of the joint family all the sons claim a share in all the fields and this leads to the fields being reduced to uneconomic holdings with all their concomitant evils. The fields cannot be fenced off from each other, sowing and reaping must be carried on by all the owners simultaneously to avoid loss and a good deal of land is wasted in unnecessary boundary lines. It frequently leads to prolonged litigation and hence to the ruination of a large number of cultivators.

Besides these institutional bases of Indian economic life there are two more social institutions which have influenced the economic evolution of the community to a very great extent. These are the *Purdah system* and *Early marriages*. The former is the result of the contact with the Muslims and their settlement. It leads to a huge wastage of human energy by withdrawing a very large part of the population from active life. In those parts of the country where there is no purdah a large number of light as well as arduous occupations are performed by women but they are done by men in parts where it exists. Hence, the energies of the women fail to be utilized except in household affairs. Moreover, the males in such parts of the country where purdah is observed go to the towns and factories in search of employment and leave their families for want of decent living arrangements at home. This leads to all sorts of undesirable activities, and is one of the most fruitful causes of immorality, drink and disease. It has a very bad effect on the health of the females by confining them to the four walls of the house. As a result of this each successive generation grows weaker and weaker physically and mentally. The want of

sufficient exercise, fresh air, and sunshine for the mother, while the child is in the womb, makes the child weak in constitution; and absence of opportunities to the mother to exercise her emotional and mental faculties makes the child a dwarf mentally. Perhaps the system of purdah in the middle classes in India is largely responsible for that lack of enterprise, dash, and audacity which has hitherto retarded the economic development of the country.

But even more pernicious in its effects is the *early marriage* which is based on religion in the case of the Hindus. It impairs the vitality of both the mother and the child, and is thus responsible for the enormous infantile mortality and a very high mortality among the women of child-bearing age. It is also the chief cause of the low vitality and a lower expectation of life among the people of India. The chronic poverty and disease which disfigure the fair name of India are the outcome of early marriages to a certain extent. The joint family encourages early marriage by providing for the newly married couple a home. The excessively high birthrate which results from early marriages leads to "agricultural inefficiency and unemployment through sub-

division of holding and thwarts schemes of mass education and improvement of rural sanitation.”

As Dr. R. K. Mukerji puts it, “poverty is largely a matter of the manland ratio in India. In 1891 India’s population stood at 287 millions. In 1931 the population was 353 millions. This increase of numbers, coupled with the fact that the percentage of population supported by land increased from 61 in 1891 to 73 in 1931 denotes a very serious situation.”⁵ It is India’s basal economic issue. Without its solution the poverty and economic backwardness of India cannot be overcome. Fortunately, however, the attention of the nation has been focussed on this issue and the spread of education and social reform through public opinion and legislation in recent years have brought about a reaction which is slowly but steadily raising the age of marriage.

English Individualism:—The counterpart of our joint family in England is the individualistic family. It makes the individual entirely self-centred. Whatever its other defects might be, it does not foster a spirit of irresponsibility in the individual. There are no drones and parasites here as in the joint family. Individualism

inculcates self-respect and self-confidence and makes a man self-dependent. It allows complete freedom and unbounded opportunity for the development of individuality, initiative and enterprise. Dash, audacity, boldness and perseverance take the place of resignation and helplessness, listlessness and fatalism. While on the one hand, it leads to an expensive standard of consumption, on the other, it encourages accumulation of capital and large scale enterprise. The magic of private property helps man turn sand into gold, and enables him to take a lively interest in things temporal. It makes the individual realise that he is the maker of his own destiny, creator of his own fortune, and the shaper of his own future. It increases the mobility of labour and transforms the economic outlook of the individual. It goads him to increased activity and gives a spur to incentive by corresponding reward to effort. It raises the standard of living and adds to the efficiency of the productive effort.

However, it necessitates the institution of an expensive machinery for Poor Relief, Old Age Pensions and Orphanages. The Poor Rates of England, the system of the doles to the unem-

ployed, homes for the destitutes and orphans and the elaborate system of old age pensions and social insurance etc.—all these are the results of individualism. They multiply state expenditure and necessitate heavy taxation. The iron law of the survival of the fittest in the struggle for existence leads to unbridled competition with all its concomitant evils. Adulteration of goods, production of spurious and cheap commodities, wasteful expenditure on scientific advertising to capture the popular imagination by appeal to the various instincts and sentiments of consumers, over-production and crises—these are some of the evils of individualism and the freedom of enterprise which it implies.

THE ECONOMIC FOUNDATIONS OF ENGLAND

CHAPTER III

The Manorial System

The economic history of a country is a connected growth. Modern methods of production and the conditions of the people at the present time have been evolved and established by gradual changes during a long period of transition from the mediæval to the modern ages. To follow the significance of these changes and their effects on modern conditions, it is very necessary to review the economic conditions in the Middle Ages.

The description of the economic organisation of England in the middle ages can be conveniently divided under three heads: the agrarian, the commercial and the industrial. In this chapter a description of the agrarian organisation would be given.

England during the middle ages was predominantly an agricultural country. The unit of agrarian organisation was the manor and her agrarian system as a whole was of a feudal character under which the land was owned by feudal lords and was cultivated by persons neither slaves nor

free but of a status widely varying between the two. The system has been noticed in other countries also and marks a definite stage in the evolution of agriculture.

The *manor* has been defined as a piece of land which belonged to a single owner and had a definite legal and customary individuality. Ogg in his "Economic Development of Modern Europe" has called it "the economic unit and the social cell of the Middle ages," and has defined it as an "estate owned by a lord and occupied by a community of dependent cultivators."¹ The lord acquired his proprietorship over the land by feudal grant, purchase, usurpation, or "commendation," while the tenants were the descendants of the original free occupiers of land drawn under the lord's control, or of persons who had become permanently indebted to the lord, or settlers who had sought the lord's favour and protection. Throughout the middle ages until the development of industry and town life, almost the whole of the population of England was manorial and rural.

The whole land of the manor was divided into arable, pasture and waste land. All the culti-

vated portion of the manor lay near the homes of the villagers and the waste lands stretched beyond. The manor consisted of huts grouped together about the parish church and the lord's house in the centre which had usually a courtyard with buildings all round for brewing, cooking and general farm purposes. The houses of the villeins and the cottars lay alongside the single street of the village leading to the stream where a bridge or a ford might form a natural centre. The most favoured spot was of course selected for the manor house near which the church was also usually to be found. There were no shops except perhaps that of the smith, and occasionally there was a mill on the stream. The houses of the tenants were "thatch-roofed, one-roomed, cheerless and closely adjoined by stables and granaries."² The wants of the people were few and simple and were usually satisfied locally except for salt and iron which were not obtainable in every village. Agri-culture was the chief occupation of the people. Women wove their own cloth and men tanned their own leather. The tenants were compelled to grind their corn at the lord's mill for which they had to pay a toll or fee. Sometimes, however,

2. *Ogg: op. cit.* p. 20.

a villcin might acquire the right to put up a mill for suitable consideration and thus would originate the village miller. Each manor was self-sufficient and there was not much of mutual helpfulness between different manors or of contact.

There was an utter lack of means of communication and transport and hence the surplus products of one manor could not be transported to another manor in times of need. There was therefore an alternation of bumper harvests and famines and scarcity on account of similarity of products and consumption between them. Moreover, there was no continuous opening for trade, and hence no room for division of labour. The stranger from a neighbouring manor was suspect. Socially also the manor was self-sufficient. Each community formed a large family and was bound by ties of blood. It was a corporate body in which local law and custom were dominant. Status and custom, in place of modern competition and contract, ruled supreme.

However, some external contact was established by the *fairs* which were a normal feature of the period. Traders, mostly itinerant, would thus establish some connection with the outside world.

at such fairs where such articles of luxury or need as were not produced locally were bought and sold.

The manorial lord might be a noble, a bishop, or a king; he might own several manors or be the owner of a single manor. In the latter case he used to live in the manor house and supervise the affairs of the manor himself. Often, however, he was an absentee landlord and visited the manors only occasionally for feasting and drawing the largest amount of supplies from his various manors. In this case, he would appoint an agent who was called the bailiff who conducted the affairs of the manor on his behalf and looked after the proper cultivation of the demesne or the lord's holding. Then there was another official known as the reeve who acted as foreman of the bailiff. The third important official of the manor was the steward who controlled and watched a number of bailiffs and represented the lord in a larger sense than the bailiff. The steward controlled the manorial courts.

The most important characteristics of the manorial system, however, were the open field and the two or three field systems. Open field cultivation *i.e.* without hedges or walls, was universal

and the land was cut up into strips. Land was ploughed in common and an acre or half an acre was the standard area of a strip. Generally it was a furlong (220 yds. in length and a chain or 22 yds. in width). Strips lay side by side forming long sections; these were called furlongs or shots. Sometimes triangular strips were also found when the ground was irregular. Between every two strips was the space on which the plough was turned and this was the only boundary mark. There were no durable enclosures at all and the crops were protected by rudely fashioned barriers. After the harvest the hedges were removed, the cattle were allowed to graze and the arable land was treated as a common pasture.

The *virgate* or one man's holding consisted of generally 30 or 40 such strips, scattered about the whole arable area and never formed a compact whole. The pasture land was used in common and the rights to graze depended on custom, the size of the tenant's arable holding and the number of his cattle. The poorer pastures, away from the village, were freely accessible to all with rights to collect fuel, etc., from the wood. The village was generally situated by the side of a stream; and meadow land surrounding it was

usually taken by the lord who let it or divided it like the arable land. It was thrown open to grazing after the hay harvest.

Cultivation was at a low level, the present day rotation and manuring and many familiar roots and crops of today were unknown. Land was therefore not very productive. In early times half the land was left fallow so that each half was tilled and used for pasture alternately. A distinct advance was made when the three field system was adopted under which only a third of the land was left fallow permanently. One of these three fields was sown with wheat, the other with barley or oats and the third was left fallow. Next year one of the first two was left fallow, and the year after, the remaining one. Thus, every third year one of the three fields was allowed to recuperate its fertility by fallowing.³

	1st year	2nd year	3rd year
Field A ..	oats and barley	fallow	wheat
Field B ..	fallow	wheat	oats and barley
Field C ..	wheat	oats and barley	fallow

3. *Briggs and Jordan: Eco. History of England.*

The assignment of the strips to the tenants seems to have been based upon the desire to ensure equity of allotment as the fields differed in fertility and ease of cultivation and their minute subdivision was thought to be necessary to prevent the more desirable areas from being monopolised by the favoured few. Arable fields were thus made up of any number of "blocks of strips set at right angles or inclined one to another presenting the chequered or variegated appearance of a patch-work quilt."⁴

Cultivation was carried on according to customary methods and the yield was very small. The wants of the scanty population were few and simple and could be easily satisfied in peaceful times. There was no stimulus to improvement. The holder owned the land at least for the year, but he had to plough, sow and reap at the same time with his neighbours. Ploughing and reaping were generally co-operative. This co-operative enterprise ensured equality of treatment but it prevented any improvements or innovations. The fragmented and scattered holdings led to much waste of time and energy, to waste of land in boundaries and to disputes.

4. Ogg: op. cit. p. 22.

The lord sometimes possessed strips in the common fields, rights to graze in the open pasture, and the best land, generally meadow, but sometimes even arable, was reserved for him. ✓ All this collectively was called the Demesne which comprised one third of the total manor. The lord was supreme and his power over the tenants was only checked by custom and the manorial court.

The cultivation of demesne was done by the week-work or boon-work of the villeins, cottars and freemen. But the cottars and the poorer villeins devoted their spare time for wages to cultivate the demesne. The wealthier villeins cultivated a fixed part of the demesne for a fixed rent and this secured a steady income to the lord and relieved him of trouble and responsibility. There was very little permanent labour given to the demesne exclusively. The freeman owed an obligation of military service to the lord.

Thus, the keynote of the manorial system was self-sufficiency, stability, and conservatism. The bulk of the land was cultivated by villeins who were not slaves in the sense that they were free to everyone but their lords. They were

bound to the land and could not leave it without the lords' permission. Their virgate consisted of 30 acres with rights of pasture, etc. The villeins had no protection against the lords except in the manorial courts. Work on the lord's demesne for so many days in the week was the plainest mark of villeinage. They had also to do some boon work in the year during the spring and autumn ploughing and harvesting. Later on quarterly payments were made in money or in corn or animals. There were miscellaneous payments like carting and fines at the marriage of daughters. This was called the *merchet*. This was a sign of bondage and servitude.

Next in numbers were the cottars. They had an inferior position and social status to the villeins. Their holdings were usually 5 or 10 acres. Therefore they had to seek employment on the holdings of others for their needs. For these services they were no doubt paid. This was the beginning of the paid labourer working for wages. Below the cottars were the *slaves* who were absolutely dependent and were probably the remnants of the conquered race. Then the last important class was that of the freemen.

They were warriors or rich villeins who had won the favour of the old lords by exceptional service or became free by payment. They had obligations similar to those of the villeins but they paid rents and their rights were more clearly defined. They did no week work, or the quantity and time and manner of it was fixed, and they paid no fines.

The manorial system was a stable, interlocked organisation of subsistence farmers. In the words of Ogg "it was a compactly organised, economically self-sufficing and socially independent unit."⁵ In those early times the system provided physical protection to the tenants and the lords and helped people to acquire an interest in the land and have some economic independence. It secured the standard of cultivation and encouraged thrift and saving. But it was very difficult for the small peasants to get land. The dealings of the manorial officials with the tenants were rather harsh and arbitrary. The scattered and fragmented holdings caused a good deal of loss of time and energy and the lack of hedges or fences caused trespassing and led to litigation. All the processes of agriculture and the rights of

5. op. cit. p. 24.

the people were regulated by rigid custom and the individual had no freedom or initiative. It was impossible to experiment with new cultures or methods. Under these circumstances the art of agriculture was very crude, crops were few and poor, agricultural machinery was very simple and the harvest was liable to damage by flood, drought or other natural calamities. Potatoes and root crops in general were unknown; while clover and other improved grasses were still to come. The smallness and uncertainty of the produce and the lack of means of communication and transport of bulky commodities over long distances made the population liable to famine. The rural life of the country in general was very monotonous and miserable, houses were ill-kept and insanitary and there was no stimulus to enterprise or opportunity for betterment.

Decline :—This rural organisation of England in the middle ages began to disintegrate in the fourteenth century and its breakup was very rapid in the 15th century. A new type of agricultural organisation based on the free mobility of the farm labourer and a wider diffusion of ownership of land was gradually evolved. Two notable features of this transformation were *the decline of*

serfdom and the *alienation of the demesne*. In the 13th century the bulk of the population of England was unfree; slaves had risen to the rank of serfs; but after the 14th century serfdom began to decline gradually. With the growth of the population, the unification of the country under a strong central government and a diversified agriculture the system became entirely out of date. Gradually a new class of free tenants grew up by commutation of services or dues in kind for money. The arbitrary exactions of the tenants were fixed into definite obligations and all services and dues in kind were converted into money. With the gradual growth of towns barter gave place to a money economy and with the increased circulation of money by the fifteenth century fixed money rents came into general vogue. Many farmers obtained their freedom by manumission and by flight from the manor. But the two most fundamental cases of the breakup of the manorial system were the economic disorder caused by the *Black Death* and the *Peasants' Revolt* and the coming of the *enclosure movement*.

The process of emancipation of the mass of English peasantry was given a great stimulus

by the Black Death or the Great Plague in 1348-49 which produced a conflict between the landlords and the tenants. It levied a heavy toll and suddenly swept away between $1/3$ and $1/2$ of the population and created a serious shortage of labour. It caused a general disintegration of the rural society and gave a scarcity value and increased mobility to the villein and the hired labourers. As a consequence wages rose by 50 p.c. and lands remained uncultivated. The free labourers could get almost what wages they asked for. On the other hand, the villeins and cottars felt it to be a great grievance that they should have to give their old services and get no advantage at all; and so many of them ran away from their plots to get higher wages. The landlords were very hard hit and regretted the commutation of the services of their villeins into money payments and tried to go back to the old system. They resented the high wages very acutely and through their control of the parliament they tried to establish the old order by law. In the Statute of Labourers in 1349 they tried to compel the half-free tenants to perform their old services and to enforce a maximum rate of wages for

free labourers imposing penalties for its breach and decreed that labourers should be compelled to work at the pre-Plague rates. But it was powerless to stop the movement and aroused great bitterness and class enmity.

The growth of the woollen manufacture gave an alternative occupation to labourers for it was also short of men because of the Plague. For more than a generation there waged a bitter conflict between the landlords and the peasants and this was the principal cause of the Peasants' Revolt in 1381 in which for the first time in English history the labouring classes boldly repudiated the right of their masters to dictate the conditions of work and demanded the total abolition of serfdom and forced labour.

A more important change than the commutation of services and the abolition of serfdom consequent upon the Black Death and the Peasants' Revolt, was the disappearance of the manorial lords from the cultivation of the demesne. As has been mentioned earlier in this chapter, it was customary for the lords to grant out small portions of the demesne to tenants for rent in money but the bulk of the demesne lands were kept still in cultivation by

the lords and on it the villeins and the cottars used to labour. But now even this began to be rented out to the tenants. The commutation of services for money rents together with the growth of a class of free wage-earners made it difficult for the lords to cultivate the demesne. The commutation deprived them of the supply of forced labour, and the abnormal rise in wages after the plague made it impossible for them to employ hired labourers. The result was that the demesne was leased out to tenants and a new class of free tenant farmers or yeomanry grew up with the consequent growth of inequality of holdings and capitalistic type of farming due to the concentration of land in fewer hands. As *Cheyney* has put it, 'whereas, during the earlier Middle Ages, lords of manors had usually carried on the cultivation of the demesne lands themselves under the administration of their bailiffs and with the labour of the villeins making their profit by obtaining a food supply for their own households or by selling the surplus products, now they gave up their cultivation and rented them out to some one else, making their profit by receiving a money payment a rent. They became therefore landlords

of the modern type.”⁶

Through the process of enclosure many pieces of waste or common lands and serf's lands were enclosed by the lords for the profitable business of sheep-farming. Then the inroads made by royal jurisdiction into the manorial courts caused their decay. These important agrarian changes influenced very greatly the towns and the urban life. The towns became independent of the manorial orbit, their wealth and prosperity increased still more and the gild system became more highly organised.

Enclosures:—The century and a half extending from the middle of the 15th to the close of the 16th century is a period of remarkable changes in the political, intellectual, religious and economic conditions of England. At the beginning of the period, the old manorial system was gradually dying out; the demesne land was being leased out to renting farmers, serfdom had fallen, the manorial courts and officers had sunk into insignificance and the Black Death and Peasants' Revolt had dealt it a severe blow. The beginning of the Enclosure movement was the last straw on the manorial camel's back

and sounded the death knell of the open field system with its scattered tenancies, joint labour and compulsory rotation of crops. From the 13th century proprietors were consolidating their demesne lands while tenants were eager to exchange their scattered strips for compact holdings which could be enclosed. In 14th and the 15th centuries enclosure of arable grounds progressed rapidly and by the opening of the 16th century the movement had gained a great momentum.

The *enclosure movement* involved the disintegration of the open field and the emancipation of the tenants from community control, and comprised four processes: the consolidation of scattered strips into compact holdings permanently hedged; the conversion of arable into pasture, the concentration of holdings or engrossing; and the occupation of the waste, pastures, and meadows, terminating rights in common.

The enclosure for arable farming also began as early as the 13th century but assumed importance only 200 years later. The enclosures now being made were closely connected with the growth of sheep-raising which was caused by the increased demand for wool in Flanders.

etc., and the rise of woollen manufactures in England. Sheep-raising at that time possessed a number of advantages over arable farming. It required fewer hands so that high wages were a less serious obstacle than in agriculture; it afforded a superior opportunity for capitalistic enterprise, and wool was easily transportable and always saleable. Hence, there were widespread readjustments involving the permanent fencing of fields as "sheep walks" and undertaken by the manorial lords or freeholders or tenants. Thus enclosing of the fields for sheep-raising became the fashion of the day. Sometimes it involved the enclosing of open pasture, meadows, and waste but more frequently the consolidation of large numbers of arable strips. It proved injurious to the tenants because they lost their traditional common rights in pastures—an indispensable element in their subsistence scheme—and suffered evictions, and destitution or became wage-earners. Sometimes a whole village was deserted, and the dissolution of monasteries also indirectly led to its encouragement.

The enclosures aroused a great opposition. The nobility and gentry were in favour of the

movement as they increased their rents thereby, but the government was opposed to it. Legislation favouring enclosures but leaving sufficient pasture for free tenants began in 1235 (The Statute of Merton) and confirmed in 1285. For a century the state was favourable but the dreadful consequences later aroused strong feelings and the government intervened at last with full force. In the 16th century the movement was deprecated and resisted. Sir Thomas More condemned it in his *Utopia*, and Bishop Latimer and others lamented its spread. Throughout the Tudor Period repeated attempts were made to restrain it. In 1489 a statute prohibited the conversion of arable into pasture. It was re-enacted and strengthened in 1514, and a commission was appointed in 1517 by Wolsey to enquire into the movement. In 1548 another commission was appointed and fresh legislation was passed in 1552, 1554, 1562, 1598. But the tide of agrarian change could not be stemmed and the statutes were largely inoperative. In 1624 all of them were repealed. But it led to poverty, disorder and crime culminating in the Elizabethan Poor Law of 1601. Besides government interference there were riots and revolts like the

"Pilgrimage of the Grace" in 1536, and the "camp" under Kelt in Norfolk and another in Buckinghamshire. The enclosure movement was at its height in the early 16th century and by the close of the century it had run its course for the time.

THE ECONOMIC FOUNDATIONS OF ENGLAND

CHAPTER IV

Mediæval Trade and Industry

One of the most important contributions of the Middle Ages to modern times was the growth of the town with its free, trading and industrial population. After the downfall of the Roman Empire towns decayed, manufactures were destroyed and trade declined. There was increased ruralisation and the village community became self-supporting, so that there was no need of producing surplus food stuffs or manufactures. Industry was centralised in the manor. The articles of food and drink were supplied by the lord's mill, the lord's bakery, the lord's brewery and wine-press, while clothing, furniture, candles and other things were produced from local materials. Implements and tools of husbandry and rural cottage industry were fashioned and repaired by the local smith and such things as could not be grown locally were supplied by the itinerant. Before the twelfth century, therefore, like agriculture, industry was mainly servile besides being scant and simple.

Later on, however, it began to acquire a free status.

Similarly there was an absence of commerce on a large scale. The lack of communication and transport enforced self-sufficiency. It is true that there was some trade in salt, metals, tar, fish and furs, and in spices, jewels, fine fabrics, and wines etc. but still commerce was at the lowest ebb. By the 11th century it slowly changed and trade increased both in volume and value, in distance covered and in organisation. The chief factors contributing towards this progress were growth of population, rise in the standard of living, the development of industry, the increased use of money and the creation of new habits and tastes and the introduction of new wares as a result of the contact established with very remote lands by the famous religious wars called the *Crusades*.

Towns:—The growth of both industry and trade, however, was bound up with the revival of town and town life. All these changes began in the 11th century and continued with great rapidity in the 13th and the 14th. The *Crusades* gave a great impetus to the development of towns and town life, and therefore, to industry and

trade. They did not bring towns or their trade into being but they greatly accelerated urban growth by stimulation of commerce and industry. As Adams says, "The Crusades created a constant demand for the transportation of men and of supplies, built up of themselves a great carrying trade, improved the art of navigation, opened new markets, taught the use of new commodities, created new needs, made known new routes and new peoples with whom to trade, stimulated explorations and in a hundred ways which cannot be mentioned, introduced a new commercial age."¹ Through them the towns secured rights of self-government and the serfs became free men. Towns could not grow except on a basis of the personal freedom of their residents, commerce and industry could not be developed unless those engaged in such enterprises were assured the freedom to combine "to move about, to hold property, and even to control local taxation and justice." The Crusades therefore stimulated the growth of towns by creating personal freedom and mobility. However, the development of town and town life with industry and trade was due to deep-seated economic

1. Civilisation during the Middle Ages.

conditions. These were the increase of population, increase of wealth, larger demand for manufactures for an improved standard of living, the emancipation of the serfs, and the gradual breakup of the manorial system. Gradually as the old towns revived and new ones sprang up, an important urban element emerged from the rural masses which was industrial or commercial or both.

It was through charters from the king that the towns secured their rights. Early in their history the townsmen secured that the town court should be established in the town itself; they also secured the right to elect their own magistrates and town officers, and the freedom of those villeins who had escaped to the towns and lived there for a year and a day undetected by their masters. They also secured the privilege of establishing a gild merchant to regulate and control trade in their self-interest. Thus the towns enjoyed the right of self-government, had a court with jurisdiction over the people of the town and paid tolls and dues to the kings. Later on they had their own police and by the 13th century were represented in the Parliament.

The growth of towns brought about a greater

diversification and specialisation of occupations, provided a better market even for the villagers both for the sale of their surplus produce and the purchase of their manufactured requirements. They secured personal freedom for their citizens, and by affording attractions as well as opportunities to serfs to escape their thralldom, started the decline of the manorial economy. They were as Clive Day says, "Islands of freedom in a sea of serfdom and half freedom."² As a result of these and other forces, the manorial system began to weaken. Civic freedom and protection afforded by the towns and the opportunities of meeting together of men in larger numbers than before gave a great impetus to commerce and industry. However, the keynote of the towns, like the manors, was self-sufficiency, stability and social independence.

The chief features of this mediæval trade were the predominance of the merchant or trade guilds; the overwhelming importance of fairs and markets; and minute regulations of trade and its restrictions by tolls and tariffs.

The Gild System.

In the 12th and 13th centuries the entire life

of the towns pivoted on the merchant guild. The economic activities of the towns were controlled and regulated by associations of traders or artisans in the interests of all their fellow occupationists in the town and with a view to reserve the monopoly of these occupations to themselves. These associations arose in response to the well-known need of the day for corporate associations, since the individual was not strong enough to secure full freedom, economic or political, for himself. The *merchant guild* was the earlier form of such associations; it arose in England in the 11th century, and included in its membership not only traders but also artisans, in fact, all who bought and sold in the town. The most important feature of the guild was its solidarity. Very early in its history, it secured public recognition and was granted the right of regulating trade and looking after the economic and social interests of its members. These guilds assumed responsibility for protecting the life and property of their members travelling and trading abroad, and provided for them in poverty and sickness. They helped the widow and children of a deceased member as also one who was imprisoned. The membership of the town guild conferred a recognised status on merchants in

foreign towns and their gild was responsible for their debts to foreigners. Usually the membership descended from father to the eldest son, but citizens could also join on money payment. The retail trade of the town was a monopoly of the local gildsmen, "foreigners," that is merchants from other towns could only sell or buy wholesale to or from the gildsmen only, and had to pay the town tolls; competition among members was discouraged; "*regrating*", "*forestalling*", and "*engrossing*" (selling at a higher price, buying wholesale and buying privately) were severely punished; and members were given the privilege of the "lot", that is, of sharing in any profitable bargain that another member might have made.

Later Mediæval Commerce

The trade of the towns was, as we have seen, regulated in the interests of the town community as a whole. Town authorities imposed tolls and duties for revenue purposes and charged a toll for the use of the town market. Prohibition of the export of necessary materials was enforced, and "foreigners" were placed under a disadvantage in the town market by having to pay the tolls and by being excluded from the retail trade. Market regulations aimed at preventing fraud and sale of

stolen property. Another common feature of commercial organisation was the regulation of prices, the belief that for every commodity there was a "fair price" which could be determined, and mediæval statute books therefore contained numerous provisions to secure this desideratum. Of the same class were the laws regulating rates of interest with a view to prevent usury.

Still another characteristic of mediæval trade and commerce was the predominance of *markets and fairs*. These were periodical gatherings of merchants at certain special localities at stated intervals of time, and according to their local or general importance for a whole area, they attracted merchants from near or distant parts. The former were called markets which used to be held on one or more days of the week and the latter fairs. From the point of view of general trade the periodical fairs were of greater importance. The time, duration, and place of the fairs were determined by local or national authority, and special privileges and protection were accorded to the merchants frequenting them. They were generally held under the protection of some great local lord, lay or ecclesiastical, who derived revenue from the tolls charged for the use of the

ground on which the fair was held, from the fines charged in the special court established in the fair during its duration. In those days of unsafe and difficult communications, those fairs and markets provided the only opportunities for sale of commodities on a large scale and to a wide clientele. Some of the best known fairs of the period were those of Winchester, Stourbridge, St. Ives and Boston. With the development of towns with continuous trade the fairs, except those of international reputation, declined in importance.

In addition to those temporary selling places a more or less continuous trade was carried on between the town merchants and those of other towns of England or of the Continent. The merchants of different towns, however, did not carry on an independent trade but one under the protection which the prestige of their town had obtained for them. As Cheyney has put it, "External trade was thus not so much individual between some Englishmen and others; or international, between Englishmen and Frenchmen etc. as it was intermunicipal."*

As regards foreign trade, the regulations of the fairs, town markets and of the gild merchants

*Industrial and Social History of England.

discouraged it considerably and the English merchants of the period had a very strong dislike for foreigners for whom the custom of the "hostage" prevailed. But the king, nobility and the church favoured it. With a view to encourage it Edward I issued the *Carta Mercatoria* in 1393 in which a large number of privileges and concessions were granted to the foreign traders but on account of strong protests most of them were withdrawn. The foreigners, therefore, depended almost entirely on the support of the crown.

Except some trade between the northern towns and the Scandinavian countries, the entire foreign trade of England was carried on by foreigners. The English had neither the ability, the enterprise nor the capital to engage in continental trade. English wool was most in demand which was purchased by foreigners from the fairs and the towns. Sheep-skins, hides, and tanned leather, coarse woven materials, tin, lead, and, in periods of rich harvest, grain, salt, meat and dairy products were exported. The chief countries with which products trade was carried on were Scandinavian countries, Germany, France, Italy, the Netherlands, Spain and Portugal. Of all these however, the most

important were the trade with the Hanse cities of Germany, with the Flemish cities, and with the Italian cities. The Hanse cities brought the products of the Baltic lands, such as timber, tar, salt, iron, silver, salted fish and coarse manufactures. They had their own settlement in London called the "Steelyard". The Flemish cities of Ghent, Bruges etc. brought fine woven goods like cambrics, cloth of gold and silver, tapestries and hangings, armours and weapons, glass and furniture etc. and took away English wool. They also had a Flemish Hanse or League in London. The Italian cities of Venice etc. brought in the manufactures of Italy and spices and luxuries like silks, precious stones, calicoes, muslins, rugs, shawls, tapestries, metal-wares etc. Most of these foreigners had settled in England and played a very prominent part in the commercial and industrial development of the later period. Most important of these were the Italian bankers called Lombards, the Flemings who laid the foundation of the woollen manufactures and the Genoese and Venetian merchants etc.

Craft Gilds

In the 13th century with the progress of

trade and increased business and specialisation it became impossible to control all branches of trade. Therefore, there grew up another organisation known as the *Craft Gild* which became dominant in the following century. It marked a transition from the family to the artisan stage of production. It was an association of town artisans engaged in the same craft and was a result of the increasing specialisation of occupations and a greater division of labour. Artisans pursuing different crafts organised separate associations of their own to look after their professional interests and like the merchant guilds saw to it that no non-members engaged in their craft, that no unhealthy competition arose between members, and sought to preserve the monopoly of the town market for the gild members. There were three grades of workmen in mediæval crafts; *apprentices* who lived with their masters and learnt their trade usually for seven years, *Journeyman* or day labourers who had mastered the craft and used to save funds to start shops of their own; and *master craftsmen*; the last class of workmen were full members of the gild. These guilds imposed various regulations as the quality, price of goods, places of

sale, hours of labour and conditions of work etc., for apprentices and journeymen. Many of these regulations aimed at eliminating fraud, and protecting the consumer's interests and at maintaining equal opportunities for all gildsmen.

The gilds were primarily associations for regulating trade and industry, but they also acted as social clubs to foster solidarity and co-operation among their members both in weal and woe. They performed highly beneficial services, *e.g.*, education, policing. The "Craft gild" protected the economic interests of its members. It afforded ample opportunities for the technical training of workers; it maintained good standards of workmanship and it subordinated the interests of the individual to the welfare of the community. It was not, however, without its disadvantages. Its underlying principle was monopoly; its rigid rules discouraged enterprise and it depressed wages, it fostered a type of industrial organisation productive of mediocrity.

Mediæval industry so organised was handicraft industry, manufacturing operations were few and simple, the tools and implements used were of the simplest and crudest character; there

was little capital invested in it, it used mainly local raw materials, the family was the unit of organisation, and the market for which it catered was also local. Work was carried on in the home of the worker with the help of the members of the worker's family and a few hired journeymen and any apprentices that the master might have with him for training. There were neither machines nor use of any motive power. Division of labour was longitudinal, *i.e.*, the entire work of manufacture from the purchase of raw material to the sale of the finished product was performed by the individual workers. Output was, therefore, small and efficiency of labour very low. Both the conditions of supply and demand were very stable and regular because of the absence of changes in fashion and methods and technique of production. Prices were high.

There is reason to hold that the craft spirit, at its best, was entirely to the advantage of industrial development and expansion. Indeed, as Lipson says, "*Gild control was a necessary stage in economic development.*"* ✓ When they arose, the central government was neither competent nor

*Economic History of England.

even inclined to exercise economic leadership, and hence local agencies like the gild merchant or the craft gild alone could perform this function. They fixed standards, devised ways and means to give the necessary protection to merchants and artisans, supervised manufactures and sales and did all that was necessary to promote the commerce and industry of their towns.

Decline of the Gilds

The gilds began, however, to decline rapidly in England from the 15th century onwards until by the middle of the 16th century they survived merely as a social institution with hardly any control over industry or trade. What was this due to? In the first place, the gilds suited a particular stage of economic development; a period of bad communications, imperfect central control and backward trade and industry. England was rapidly outgrowing this phase in the 15th century; the central government was now quite active and strong and interested in promoting trade and industry for the sake of revenue; people travelled all over the country with more security than before and the traders were soon to grow more ambitious and rich. The whole country instead of the town or its

immediate neighbourhood had now become a potential market for the produce of every town. The control of production by guilds was therefore bound to prove unsatisfactory and even positively harmful, particularly in those branches of industry which catered for a wider market, *e.g.*, the cloth industry. Again, England secured in the 15th and 16th centuries large numbers of immigrant artisans from the continent who could not be fitted in in the guild organisation; they were more skilful than British craftsmen and so refused to submit to guild control and the king had to free them from the authority of the guilds. In the third place, the guild itself was breaking up from within on account of the growth of capitalism within its organisation. Some among the more successful craftsmen specialised more and more in commerce and business, and the new opportunities for trade in the country and outside made them rich. They tended to keep the guild and its offices under their control, thus excluding the poorer members from any share in its work or authority. The guild thus became a monopolistic organisation; it began to limit membership and its policy became more and more exclusive and partisan. The state was, therefore, compelled to step in to regu-

were limited in 1504. But the heaviest blow came in 1547 in the wake of the Reformation when all the property of every kind of religious and social guilds and the property of the craft guilds employed for religious purposes were confiscated. Thus, as Cheyney puts it "The guilds lost the unity of their membership, were weakened by the growth of industry outside their sphere of control, superseded by the government in many of their economic functions, deprived of their administrative, legislative and jurisdictional freedom, robbed of their religious duties and of the property which had enabled them to fulfil them, and no longer possessed even the bond of their dramatic interests." Long before the close of the 16th century they had become relatively "inconspicuous and insignificant."*

Trade and Commerce :—Before the Tudor period Florence predominated over Pisa, and Genoa etc. in trade with England, her staple and staplers being wool and woollen traders. Several commercial treaties with them had been made. However, the period saw the transference of trade from foreigners to English hands. Even before 1450 trading enterprise

*Industrial and Social History of England, p. 160.

had begun and became more and more common. At the beginning of the 16th century there were 3,000 merchants in foreign trade and 3,500 trading vessels in the Netherlands alone in 1601. Export of wool came to an end during Elizabeth's reign and was succeeded by the export of woollen cloth, imports of foodstuffs and of the wines and wares of the East. The decay of older trading towns on the continent and the withdrawal of the privileges of the Hanseatic League in 1551 and the discovery of the route round the Cape of Good Hope in 1498 shifted the centre of commercial gravity from the Mediterranean Sea. Exporters of cloth were incorporated in a company of the "Merchant Adventurers" with their own coat of arms, extensive privileges, great wealth, influence and prominence. Membership was obtained by a payment of a fee of £6.13.4 fixed by Parliament in 1497.

✓ The Merchant Adventurers had local branches in England and on the Continent. They were granted a coat of arms by Henry VII in 1498, and in 1503 were given a distinct organisation under a governor and 24 assistants through a royal charter and were incorporated

through another charter in 1504 as "Merchant Adventurers". They furnished 10 out of 16 ships to fight the Spanish Armada. The larger part of the foreign trade of England in 15th and 16th centuries was carried on by this great commercial company. Most of them were London mercers.

Chartered Companies :—During the latter part of the 16th century various other companies with Government patronage and charter were floated to trade with foreign lands. The Russia or Muscovy Co. was organised in 1554 to trade with Russia and the Baltic Sea countries; the Levant or Turkey Co. was formed in 1581 to trade with the East, the Barbary or Morocco Co. was formed in 1585 but failed; and in 1588 a Guinea Co. began trading and in 1600 the East India Co. Excepting the latter which was a joint stock all were Regulated Companies whose members carried their operations in common but owned individual capital, and did not share the profits or losses but bore them individually. In the Joint Stock Companies the capital was common, management was done through a directorate, liability was limited and shares were transferable. The absence of credit, scarcity of

revenue, corruption, and risks of sea voyage made it absolutely necessary to travel by sea in flotillas for the development of new colonies and trade. The search of a northwest or northeast passage to the Orient and the efforts to get an entry into closely guarded Spanish possessions in the west for the thirst of gold as well as, the expeditions of the Bristol merchants and others organised by the king were a part of the efforts of these bodies to carry their trade into new lands. Thus as a result of the commercial treaties, royal patronage, the enterprise of individual merchants and the trading companies English commerce became vastly greater than even before and comprised Scandinavia and Russia, Germany and Netherlands, France and Spain, Italy and the eastern Mediterranean, and even America and India. Further, it had come by now almost entirely into English hands and all exports and imports were carried mostly in ships built, owned, and manned by the English. And to crown all this the defeat of the Spanish Armada in 1588 left England supreme in naval power and laid the foundations of worldwide trade.

Capital and Interest:—The growth of com-

merce, brought a great amount of treasure (gold and silver) which were supplemented by the daring acts of plunder by the "Sea Dogs." This led to an increased circulation of money. After 1560, the amount of money in England was probably doubled, trebled, and quadrupled and increased still more during the next 100 years. This led to a rise in prices upto 4 times at the beginning of the century; and a phenomenal increase in the capital of the country to help the growing and extensive manufacture, trade and agriculture and the introduction of improved methods etc. The extensive and varied use of capital also brought about a change as regard the idea of interest. In the Middle Ages interest was illegal and its payment wicked. Very little capital was invested in agriculture, handicrafts or local trade, and borrowing was resorted to only for occasional exigencies. But with the enclosures, the Domestic System of industry and with the growth of an extensive foreign trade and shipping, and with the increase of money and savings, borrowing for productive purposes became a normal feature of economic life. In 1545 a law was passed legalising interest if the rate was not higher than 10%. It was

repealed in 1552 but re-enacted in 1571.

Trade and Tariff Policy:—During this period a deliberate and continuous policy of encouragement in commercial matters was followed by the governments which was displayed in their restrictions and burdens upon the foreign traders and the withdrawals of their privileges ultimately. The Hanseatic League with its organisation at the Steelyard in London was frequently intruded upon by the Customs officers in 1493; in 1504 heavy penalties were threatened if they exported cloth to the Netherlands during the war and in 1551 their special privileges were taken away, and then finally swept away in 1578.

✓After 1587 the Venetian flag disappeared from the English ports.✓ In the meantime a series of favourable commercial treaties were made with Denmark in 1490 getting liberty to trade in that country, Norway and Iceland; with Florence in the same year getting a monopoly of sale of wool in Florentine dominions; in 1496 with the Netherlands and with France and in 1499 with Spain. The foothold gained in the continental countries was held with tenacity through all the ups and downs of English relations with them.

The government also encouraged ship-

building to strengthen trade and enterprise, and to have colonies. In 1485 a new law was passed to restrict the import of wines from Guienne and Gascony in English vessels only. In 1489 woad, a dye stuff was included in it and it was enacted that all export or import of merchandise should be carried on in English vessels if sufficient English vessels were in harbour at the time. This policy was abandoned in the reign of Edward VI but renewed and made permanent by Elizabeth. By encouragement of fisheries as well English sea-faring was increased.

A perusal of the events of the Tudor period brings out clearly the broad fact that the government had begun to regulate industry, trade and agriculture which was in conformity with contemporary opinions and feelings. The attitude of the Tudors was always one of paternalism. "Thus, instead of industrial life being controlled and regulated by town governments, merchant and craft guilds, lords of fairs, village communities, lords of manors and their stewards, or other local bodies, it was now regulated in its main features by the all-powerful national government."* The period witnessed the birth

*Chyng : op. cit. p. 151.

of a new intellectual life and a new ideal of government.

Pauperism and its Remedy:—These changes in the economic and social conditions of the country led to pauperism. In 1531 an Act was passed to maintain vagabonds and beggars. In 1536 another act prohibited private persons from giving money, but provided for a charity fund to be collected by church wardens on Sundays and church holidays. All idle children were provided for except sturdy vagabonds. Another law was passed in 1563 which required a man to appear before a justice of the quarter sessions and submit to a tax or assessment imposed upon him by them or be imprisoned. The poor tax was now a compulsory contribution to mitigate a social evil and the Act of 1601 prescribed a compulsory poor rate in every parish, named the property to be taxed and provided for penalties for default. But as the Act did not provide for an employment for the poor it was highly degrading, put a premium on idleness, and encouraged the employers to pay less wages and thus make the labourer more and more dependent on poor relief.

Mercantile Policy in England:—During the

who e of the 16th, 17th and 18th centuries, the foreign trade and industrial policy of England was guided by mercantilism. It aimed at a thoroughgoing regulation of trade and industry with the definite and avowed object of augmenting the national wealth and the power and influence of the national government. The object was thus not only commercial but political also.

According to this theory the wealth of a nation was to be measured only in terms of gold and silver in its possession and the only thing essential for the prosperity of a country was to increase the quantity of the precious metals by all means possible. An accumulation of gold and silver was also necessary for the prosecution of wars. With this end in view measures were adopted to encourage the importation of gold and silver and to discourage, as far as possible, their exportation. Trade policy therefore aimed at securing a favourable balance of trade by encouraging the growth and extension of nascent industries by prohibiting the importation of manufactures and levy of high protective duties on other foreign articles except raw materials of industry. Bounties were granted to

manufacturers and export of raw materials and food-stuffs was prohibited. In other words, the export of goods which brought treasure into the country was encouraged and imports which sent it out were discouraged. Internal tolls, tariffs and barriers of the Middle Ages, were abolished for developing the national market while strong tariff walls were erected against foreign countries. The colonial markets were monopolised and production and industries which would tend to compete with home products were regulated stringently and selfishly. This 'sole market theory' looked upon agriculture in a step-motherly and indifferent fashion and exaggerated the importance of manufactures in national economy. Therefore to ensure an adequate supply of labour, of tax payers and of soldiers, the growth of population was strenuously encouraged for the economic, financial and political power of the State. Hence, the strongly centralised absolutism and the far-reaching state-tutelage which organised every economic institution and regulated wages, prices and hours of work, etc. Foreigners were invited to teach the natives the arts and crafts. Government Factories were established and many commercial pri-

vileges and immunities were granted. ✓ The whole series of elaborate regulations from the time of Richard II and culminating in the Navigation Acts of 1651 and 1660 and the state measures to regulate industries and the flow of the precious metals are traceable to this doctrine of mercantilism. According to the prevailing notions of the time it was justifiable and furthered the progress of the nation, but in the 18th century it degenerated into an one-sided system for the development of exports and became so inequitable and obnoxious a fiscal system with intolerable impositions of duties that it strangled the economic activities of the people. The American Revolution sounded its death-knell and the economic liberalism of the Physiocrats and Adam Smith causing a revolution in the thought of the times completed its rout.

The Domestic System

Thus, under the influence of expanding markets a new type of industrial organization arose in England which is known as the domestic system though perhaps it would be better to call it the "commissionsystem" or the "putting-out system". It first arose in the woollen industry which was the most important English industry of the

day.* We saw above how journey-men unable to find admission to the guilds migrated to rural areas to set up business there. It was among these rural cloth workers that the system arose first. Division of labour and specialisation was far advanced in this industry so that 14 different persons were required to produce a piece of cloth. To deal with these scattered and specialised craftsmen and to look to supplies and sales another specialist was necessary and he appeared in the form of a merchant middleman called a "clothier". To begin with, the clothier was himself a cloth worker but by and by he devoted himself almost entirely to his commercial functions and assumed responsibility for the whole process of production. He bought the raw material, distributed it through his agents to the different classes of cloth workers and after inspection marketed the finished product. He did not, however, actually supervise the making of the cloth.

This system still left the artisan more or less independent and free. He still worked in his own home, in the midst of his family, and had no foreman to supervise his work. But his commercial

*Wool formed the basis of England's wealth: "all the nations of the world were kept warm with the wool from England." *Grail in British Commerce*.

independence was gone since he could sell his goods now only through the middleman. The middleman could thus cheat him over prices and piece-wage rates and enslave him almost completely by various devices. The risks of trading with distant markets were of course borne by the middleman but the craftsmen were liable to unemployment or exploitation in sympathy with disturbances or fluctuations in these markets. The domestic system has been praised occasionally for the fact that the domestic worker lived in rural surroundings, cultivated a small plot of land in his leisure hours and could fall back upon agriculture if industry failed. But this is not correct. He had to work very hard, particularly in the more specialised trade, and had no time to work on his fields, and all members of his family down to children of four assisted him as a matter of necessity. Indeed, the domestic worker was often a "sweated" craftsman.

The domestic system stands for the rise of capitalism in industry. The free craftsman of the guild stage, more or less of the same economic status, now fell under the control of small capitalists keeping large numbers of scattered workers in employment and keeping the commercial pro-

fits of the industry in their own pockets. They enjoyed a free initiative and full freedom which they employed for their own benefit. Capital became more important and essential in production than before and labour was already much inferior in status to capital in the productive system.

Some industries like coal and iron and some metal industries were already organised as large units and even in the textile industries large manufacturing units had come into being in the 16th century. But the movement was frowned upon by the State, as for instance the Weavers Act of 1555 limited the number of looms that could be maintained in one house. Moreover, there was want of capital to start large enterprises. So, while it is clear that the advantages of large-scale production were already known, this movement did not progress very far under the domestic system.

While no large progress was made in the invention of mechanical devices during the middle ages, minor technical improvements were made steadily throughout the field particularly in the spinning and weaving processes. Lee's Knitting Frame invented in 1589 was an epoch-making

invention. Similarly corn grinding was already a mechanised industry and even in the 11th century there were five thousand water-mills in England alone. In the iron industry also, some notable advances were made such as the use of mechanical bellows for the smelting furnaces and mechanical hammers for beating the crude metal. In general, however, industry until the industrial revolution, was marked by the relatively small importance of technical aids to production. Machines had not to any extent taken the place of tools in the industrial processes and the manual skill of the craftsman was still of primary importance.

ECONOMIC ORGANISATION OF ENGLAND IN 1760*

CHAPTER V

The year 1760 is a landmark in the Economic History of England. The period after 1760 witnessed a series of remarkable changes in the agricultural, commercial and industrial conditions of the country and heralded the dawn of a new era of material prosperity. But to have a comprehensive idea of these changes, and to be able to appreciate their significance, it is necessary to have a brief review of the economic conditions before 1760.

Previous to 1760 the old industrial system *i.e.* the Domestic system in which agriculture and handicrafts were combined obtained in England, none of the great mechanical inventions had been introduced; and the agrarian changes were still to come. English society was predominantly rural and commercial but not industrial. "The typical picture of John Bull represents him as a

*For a fuller discussion consult : —

J. Topley : Industrial Revolution.

E. Cressy : Outline of Industrial History.

Marchant : Economic History of England.

prosperous farmer, not as a captain of industry.”*

An overwhelming proportion of the population lived in the countryside and not in towns. According to Gregory King there were 4,100,000 souls in villages and 1,400,000 in towns in 1696; whereas in 1881 there were 17,285,026 or 66·690% in towns and 8,683,026 or 33·3% in rural areas.

The country south of the Trent was by far the richest and the most populous. North of Trent $\frac{1}{3}$ of the total area of the country contained $\frac{1}{4}$ of the population in 1700 and $\frac{1}{3}$ in 1750 while in 1881 more than $\frac{2}{5}$. The most thickly peopled counties were the manufacturing west, the Midlands, and the agricultural counties—all south of the Trent. As regards cultivated land and wastes according to G. King 22 m. acres of land or about $\frac{3}{5}$ of the whole country was occupied as follows: arable land 11 millions, pastures and meadows 10 m. and houses and gardens and orchards 1 m. Another writer has divided them half and half, while Arthur Young wrote that out of 34 million acres 32 million acres were arable and pastures half and half. However, no reliance can be put on these

* *Knowles: Industrial and Commercial Revolutions* p. 364.

figures, because no systematic and regular census was taken in the country before 1801.

Agriculture

The enclosure of the common lands had led to a good deal of agricultural improvements. ✓ The enclosure had been going on for centuries before 1760 but it became more rapid since. Between 1710 and 1760, 334,974 acres had been enclosed whereas between 1760 and 1843 nearly 7 millions acres had been enclosed. At the beginning of the latter period a greater proportion of this land was under primitive tillage of the common fields. The Mediæval agrarian system was still in full force in considerable districts. The arable land of each village was divided into three great strips sub-divided by 'baulks' three yards wide. Every farmer owned at least one piece in every field. These scattered strips were very uneconomical in cultivation. Tillage was customary and common. On account of shortage of cattle the cultivation of the land was done collectively or on a co-operative basis. Fields were open or unfenced and the Three Field System of cultivation was still in vogue. One strip was left fallow every year in rotation; on the other two, wheat and barley were grown;

sometime oats, peas or ryes were also substituted for barley.

The meadows were also held in common. Upto the hay harvest every man had his own plot, but while in the arable land the plot rarely changed hands in the meadows the different shares were apportioned by lot every year. After the hay harvest the fences were removed from the meadows and all had common rights of grazing on it. Similarly the stubbles were grazed but here the right was rarely common. Every farmer had the right of pasture on the waste as also of collecting fuel,

Crops were poor and customary. There was no rotation of crops, no cultivation of fodder crops, like turnips, or clover, or artificial grasses. There was also no sheep-farming on a large-scale. Sheep were miserably small. Out of a carcase of 26 lbs. only $3\frac{1}{2}$ lbs. of fleece could be obtained on sheep grazed on an open field as against 9 lbs. on sheep in an enclosed field. On account of the fragmented and scattered holdings much valuable time was lost in travelling to many dispersed pieces of land from one end of a parish to another. It led to perpetual quarrels.

"The peasant farmers were either copy-

holders paying a nominal sum per year and the best beast or chattel on inheritance, small freeholders or small lease-holders. The last could be ejected the two former could not.*

The early enclosures made under the Statutes of Merton (1235) and Westminster were taken from the waste after the lord had left sufficient pastures for the commons. But the enclosures of the early 16th century were made on cultivated land and took the form of temporary conversion of arable into pasture followed by a reconversion. As a result of the enclosure of common lands the produce increased. Alternate convertible husbandry was introduced by the manorial lords. This enriched the arable land and grass crops were cultivated. These improvements were confined to a few parts of the country only. Greater progress in the first half of the 18th century took place in Norfolk.

The period from 1700 to 1760 was one of stagnation on account of low prices. No progress was made in the management and breeding of live-stock. Agricultural implements and tools were primitive and crude. There were wooden ploughs and small narrow-wheeled wagons.

* *Knox*: op. cit. p. 364.

On an average England exported grain from 1696 to 1765 at 500,000 quarters annually to Russia, Holland and America.

The three field system and the scattered strips provided no scope for individual initiative, customary and traditional cultivation deprecated any innovations or improvements in the methods of husbandry. This together with the open field system involved much loss of time and energy in travelling from one field to another at a great distance. It also led to perpetual quarrels and litigations.

Industry

Among the manufactures of the time the woollen industry was by far the most important. *Woollen Industry* formed the basis of England's wealth; in 1701 exports were worth £2,000,000 or above $\frac{1}{4}$ of the entire export trade; in 1771 they were worth £4,000,000 or between $\frac{1}{3}$ and $\frac{1}{4}$ of the entire export. The woollen and worsted producers were not concentrated in the West Riding of Yorkshire. They were dispersed in groups in the Eastern counties, the West of England, Wales, Scotland and Ireland.

John Kennedy brought in the art of weaving woollen cloth from Flanders into England in

1331 and received the protection of the King who invited other fullers and dyers. Throughout the 14th century the industry was flourishing and gradually spread into Norwick, Kendal, Somerset, Dorset, Bristol, and Gloucestershire, Devonshire, Surrey, Kent, Essex, Berkshire, Oxfordshire, Wilts, Worcester and Yorkshire.

In 1760 there were three chief centres of woollen manufacture. Eastern counties of Norwich, Colchester, Sandwich, Canterbury, Maidstone and Southampton. The wars of the Netherlands led to the persecution by Alva (1567-68) of many Flemings who settled in these towns and introduced the "new drapery"-baize, serges, bombazines camblets, etc., as distinguished from the 'old drapery', that is broadcloth, Kersies, etc. In the west of England the chief seats were Bradford in Wilts, Denezis, Wexminster and Frome, Trow-bridge, Stroud and Taunton. The presence of the streams and Cotswold wool formed the attraction of the districts. A branch of the industry extended to Devon. The third chief seat of manufacture was the West-Riding of Yorkshire where the worsted trade centred at Halifax and broadcloth at Leeds. It will be seen from this short survey

that however greatly the production of these districts may have changed in proportion since 1760 the several branches of the trade are even now distributed very much as they were then; the West-Riding being the headquarters of the worsted and coarse cloth trade, while Norwich still keeps the crepe industry, and the West manufactures fine cloth.

The increased demand for wool led to large enclosures of land and to improved breed of sheep. The finest cloth in the West of England was, however, manufactured from Spanish wool; while at Norwich, Lincolnshire and Leicestershire wools were used in Arthur Young's time. The estimated value in 1785 of the woollen manufactures was £16,800,000.

Next in importance was the *iron* trade. Though by this time a decaying industry, it was largely carried on the Weald of Sussex where in 1740 there were ten furnaces producing annually 1400 tons. It developed to a great extent in the 17th century and in 1724 it was the chief interest of the country. Gloucestershire, Shropshire and Yorkshire had each six furnaces. In the latter county 1400 tons were produced annually chiefly at Rotherham. There were:

also great iron works at Newcastle (1785) Anthony Bacon erected iron and coal works at Merthyr-Tydvcl and in 1760 Carron iron was first manufactured in Scotland. Altogether there were about 1737 fifty-nine furnaces in 18 different counties producing annually 17,350 tons. England perhaps imported at time 20,000 tons. But in 1881 she exported 3,820,315 tons of iron and steel valued at £27,590,908 and imported to the value of £3,705,332.

Practically the whole of the iron industry was concentrated at first in South Wales, the Forest of Dean and Staffordshire and to a smaller extent in Yorkshire. But a beginning was also made in Scotland in 1760. The smelting of iron ore was done not with coal but with charcoal and later on with pit-coal. During the Tudor period the inroads of the charcoal-burners upon the forest caused anxiety with regard to the supply of timber for ship-building. Hence, legislation was passed to restrict the use of charcoal and the clearing of the forest lands in the vicinity of the iron works had caused the industry to decline. Increasing shortage reduced the southern furnaces to two before 1788. The same fate would have overtaken the industry

in South Wales and Midland had not some means been discovered to smelt iron without charcoal. Hence, the growing demand for the increased quantities of iron and the increasing scarcity of timber near the towns led to the use of pit-coal in dwelling houses. The more enlightened iron masters took to its use. Pit-coal or coke was first employed by Abraham Darby who set up a business at Bristol. Imported iron pots were largely used by the poorer people as cooking utensils and failure to mould these in clay led him to visit the continent. Returning in 1708 he took out a patent for casting the vessels in sand and started his foundry at Bristol with the help of skilled Dutch workmen. A year later he moved to Coalbrookdale in Shropshire where he made 5 to 10 tons of iron per week and sometimes turned even 150 pots a week. Supplies of timber being scarce, he used pit-coal for calcining the iron ore in 1713. His son about 1730 began to make coke from coal by a similar method to that by which charcoal was prepared from timber. The coal was stacked in heaps, covered with iron and allowed only sufficient air to make the whole mass red hot. This coke was then used for smelting iron, a blast being provided

by a large water wheel 24 ft. in diameter, which worked a bellows. From that time onward coke came to be employed more and more instead of charcoal.

While Darby by his method of smelting iron was revolutionizing the production of pig-iron, John Huntsman, the son of a German, settled in Lincolnshire, was working out another epoch-making process. Being dissatisfied with the German steel for springs he began experiments to make a more suitable metal for it. He removed his business from Doncaster (1725) to Sheffield in 1740 and after many years succeeded in preparing cast-steel by smelting Swedish iron in crucible with charcoal. The iron took up from 0.25% to 1.75% of carbon and was admirable for both springs and cutlery. Sheffield merchants refused to purchase it, but it found a ready market in France and gained a great reputation. His rivals then petitioned the Government to forbid its exports, but it was denied them. A new factory was set up in 1770 but the process was ultimately universally adopted, so that Sheffield leaped at once into the position of the most famous centre of steel manufactures in the world. This cast steel

enabled metal-working tools to be developed. Hardware trade was located in Sheffield and Birmingham, the latter employing about 50,000 persons.

The *cotton* trade was still so insignificant as to be mentioned only once and that too by Adam Smith. It was confined to Lancashire with its headquarters at Manchester and Bolton. In 1760 not more than 40,000 men were employed in it and the annual value of the manufactures was estimated at £600,000. The exports were, however, steadily growing; in 1701 they were valued at £23,253; in 1751 at £45,986; in 1764 at £200,354. But even in 1764 they were only 1/20 of the value of wool exports. Unlike wool cotton was largely manufactured for export. *Silk* manufacture had been introduced in England by Germans and Flemings and after 1685 (the Edict of Nantes) 50,000 Huguenots with £3 m. capital migrated from France and established the silk industry on a sound footing. Their famous settlement was Spitalfields. A little later Norwich also became important. Thereafter the industry became widely distributed with more important centres at Macclesfield and Leek. Machinery was first

used in 1717 by John Lumley of Derby but the ideas were imported from Italy. About 1785 its estimated value was £3,350,000. It was a growing industry.

Hosiery:—Up to 1589 it was chiefly manufactured by hand when William Lee of Nottinghamshire invented the Stocking-frame. On account of difficulties of getting privileges and reward for his skill he fled to France. After him James Lee established an industry in London and in 1660 Charles II granted the London company a monopoly which it held till 1753. The trade expanded rapidly: Nottingham, Derby (silk) and Leicester (woollen) became famous centres. In 1635 London had 1,500 frames and by 1714 Nottingham had 8,000 and by 1853 over 11,000 frames. An important improvement was made about 1760 by Strutt, who invented an attachment for making ribbed hoses which were more elastic than plain knitted stockings.

Linen was an ancient manufacture in England, being introduced into Dundee at the beginning of the 17th century. In 1746 the B. Linen Co. was incorporated to supply Africa and the American plantations with linen made at home.

It was the manufacture of Ireland, where it further developed on account of the immigration of the French Protestants towards the end of the 17th century. A machine for spinning flax was invented about 1787 and came into general use after 1800.

As regards *Industrial organisation*, the capitalist employer was as yet not so important. A large part of the goods were still produced on the domestic system. Manufactures were little concentrated in towns and only partially separated from agriculture. The manufacturer was the man who worked with his own hands in his own cottage. An important feature, however, was the existence of a number of small master manufacturers who had their own capital and land and combined the culture of small freehold pasture farms with their handicraft. In Arthur Young's time, however, the master manufacturers had begun to employ labourers in their mills. The capitalist system was gradually emerging. The rich merchants gave out work to labourers in the surrounding villages who were their employees. They supplied them sometimes with tools and implements or raw materials and sometimes both, and themselves looked after

selling. The system provided a bye-income to the farmer, gave employment to women and children, maintained intact the family, and provided for the operation of the work in more congenial surroundings.

The mechanical arts were in a very backward state, and in spite of the woollen manufacture being the staple industry of the country, the division of labour in it in Adam Smith's time was nearly the same as it was a century before; and the machinery employed in general "not very different". Since Edward VI's reign there had been only 3 important inventions according to him:—the exchange of sock and spindle for spinning wheel, the use of machine for facilitating the proper arrangement of the warps and woof before being put into the loom; and the employment of gulling mills for thickening cloth instead of treading it in water. Evidently he forgot to mention Kay's fly shuttle in 1738. The small extent of division of labour was due to the fact that it was limited by the extent of the market. On account of bad means of communication and transport the market for English manufactures was a very narrow one. But she advanced more rapidly than other nations

in this respect. One great cause of her progress lay in the facilities for water carriage afforded by her rivers, because land communication was still in the most neglected condition. A second cause was the absence of internal customs barriers.

Transport :—The state of *roads* was execrable. It took a week or more for a coach to go from London to Edinburgh. The turnpike roads were full of ruts. Attempts to improve water communications, which largely made up for the deficiencies of the land routes, began with deepening the riverbeds. In 1635 a plan to render the Avon navigable was abandoned because of the civil war. From 1660 to 1755 various acts were passed to deepen the riverbeds. In 1720 there was an Act for making the Mersey and Irwell navigable between Liverpool and Manchester. About the same time the navigation of the Aire and Carder was opened out. In 1755 the first canal 10 miles long was made near Liverpool. Five years later, the Duke of Bridgewater had another constructed from his coal mines at Worsley to Manchester 7 miles distant. Between 1761-66 a still longer one of 29 miles was completed from Manchester through Chester to Mersey above Liverpool.

From this time onwards the canals spread rapidly.

Trade.

Besides town markets lasting for a few hours in the morning the large portion of inland trade was carried on at fairs, the most famous of which was Stourbridge lasting for a month. Other great annual fairs were held at Lyme, Boston, Gainsborough and Beverley. The link between these fairs and the industrial centres was furnished by travelling merchants. Ready cash was essential for banking was very little developed. The Bank of England no doubt existed but before 1759 issued no notes of less than £20. No other bank of more than 6 partners was allowed and in 1750 according to Burke there were not more than 12 bankers' shops out of London. The Clearing House was not established till 1775. The national debt of England had by now come into existence, and rapidly mounted in the Seven Years' war. But dealings in stocks and shares had not yet developed to any appreciable extent. The South Sea Bubble in 1719 had acted as a check to the speculative instinct of the English businessmen and financiers. Joint-stock banking was still in embryo.

The home trade was still indeed much greater in proportion than now but the exports had grown from about £7 millions at the beginning of the century to £14½ m. in 1760. During that interval great changes had taken place in the channels of foreign commerce. In 1700 Holland was the great market for England accounting for more than $\frac{1}{3}$ of the entire exports but in 1760 the proportion was reduced to $\frac{1}{4}$; Portugal taking in 1703 $\frac{1}{7}$ now took only $\frac{1}{12}$; while with France the trade was insignificant. On the other hand, the colonies were growing in importance taking $\frac{1}{3}$ of the exports. In 1770 America took $\frac{3}{4}$ of Manchester manufactures. In 1767 the exports to Jamaica were nearly as great as they had been to all plantations in 1704. The shipping trade had doubled and ships were now larger. But in this as in other branches of business, progress was still slow, local and partial.

Hence, in the first half of the 18th century Great Britain was already a flourishing commercial country with a low standard of living as compared with the present day, but on the whole substantially higher than the standards of continental countries. It was in fact a period of

rapid economic advance.* The Dutch were superior to the English in the carrying trade, but in combined industrial and commercial activity, Great Britain was well ahead of Holland and Belgium and industry was growing fast and spreading over the countryside and the urban areas under the domestic system. According to official figures the imports in 1720 were £6 millions and export 7 millions. By 1760, they were £10,600,000 and £15,800,000 respectively, *i.e.*, imports had nearly doubled in 40 years. The mercantile system in spite of its drawbacks did not prevent a rapid growth of trade in this period. A part of this rapid growth was due to the development of the re-export trade which became more important gradually and both America and East Indies supplied an increasing quantity of their products to Europe through British shipping. Thus in 1784 the re-exports accounted for £5 millions out of a total of £16,000,000 of exports. Between 1760-80 this rapid growth slackened because of war with France and in India and trouble with American colonies because of the Stamp Act of 1765 etc.

*G. D. H. Cole: British Industry and Trade Past, Present and Future.

There was also a rapid growth of the discreditable trade in African slaves which does not figure in official statistics of trade. At the close of the century imports and exports both balanced.

The Distribution of Trade and Value of Exports were as follows:—America 2 millions, Far East and India £1½ m. West Indies £750,000, Spain, Holland, Germany and Portugal each over £600,000, Italy and Africa about £500,000, and Flanders about £400,000. The exports to France increased after the Eden Treaty of 1786. Entrepot trade was largely in tobacco, sugar, rice, pitch and tar, hardwoods, Indian textiles, and after 1784 tea sold largely to European markets. A large part, however, of the exports consisted of domestic products of which woollen goods stood first.

As regards imports, American and Asiatic products bulked large among them. Foodstuffs and raw materials were already predominant but manufactures also, specially luxury goods, (such as cottons, silks from the Far East and lace, brocades and velvet from France, brass-works and toys from Holland) were imported.

From America came sugar, rice, corn, ginger, indigo, tobacco pitch and tar, turpentine,

pig-iron, timber, and hides, and bullion from the Spanish colonies. From Portugal and the Mediterranean came wine, oil, salt, fruits, olives, dyestuffs, soap, and wool; from Sweden and Russia timber, iron, copper, hemp, and flax, linen yarns, tallow, hides, and furs and potash; from Germany tinplates, skins, and linen goods; from France wine and brandy. From Ireland came linen goods, wool, woollen yarn, tallow, hides, meat and butter.*

Thus, before the Industrial Revolution, England was already a brisk and thriving commercial country with rapidly developing industries, and a growing overseas trade with all parts of the world. The so-called domestic system, under which the textile and some other industries were largely carried on, resulted in a wide diffusion of industrial activity over a large part of the country. The old centres of the woollen trade in the eastern and south-western counties were continuing to develop, and in Yorkshire there was a tremendous expansion throughout the century. The metal industries were also growing very rapidly and bringing with them an increase in coal-mining

*G. D. H. Cole: op. cit.

as the use of coal was developed both for smelting and other operations in the making of metal goods. Transport conditions were indeed very bad until the great development of canals and turnpike roads in the latter part of the century; but a good deal was done, to remake roads in the south and west of England in Défoe's day and there was also considerable activity in improving harbours and river navigation. Most trade went by the sea using the rivers as means of reaching the coast, and consequently industrial development was far less advanced in the centre of England than within easy reach of a harbour. But trade and industry managed to develop fast in spite of the deficiencies of transport; and there was a great improvement in the efficiency of the British mercantile marine. Until the outbreak of the Napoleonic Wars England was not a regular importer of wheat, but the wars and the rising population of the country made England depend thereafter to a substantial extent upon imported wheat. But the country was far from self-sufficient even at this stage.

Throughout the 18th century "the impression is that of commercial opportunity as stimulating industrial advancement rather than of industrial

expansion as causing a constant search for fresh markets. Therein lies the contrast between this period and that which came after it."

—(*G. D. H. Cole.*)

AGRICULTURAL REVIVAL IN THE 18th CENTURY

CHAPTER VI

The Agrarian Revolution

When the feverish enthusiasm for the profitable occupation of sheep-breeding and cattle-rearing created by the 'Black Death and the Peasants' Revolt spread over the land, England became a grazing country, while the art of agriculture remained stationary. New methods had been employed and a few new food plants had been cultivated by individual farmers but, in general, agricultural practice remained where it was. However, the increasing wealth of the landowners and the emergence of a small group of agricultural enthusiasts and writers were soon to exercise an influence greater than any which had affected English farming for more than 300 years. Thanks to the growing pre-eminence of England in the colonial world and world trade, greater wealth flowed into it in the 18th century than into any other country. A large part of this new wealth came into the hands of the landlords (titled nobles and country esquires) who had

long been conspicuous in commercial companies and colonial speculations; and who in their own self-interest now began to apply their increasing profits partly to the enlargement, or more profitable operation, of their ancestral landed estates, and partly to a more ostentatious living. Thus, capitalism produced a noteworthy transformation of English agriculture. It was a veritable agrarian revolution.

Its Features

The Agricultural Revolution meant different things in different parts of Europe. What it meant in England, in brief, was concentration of the ownership and control of land in the hands of a decreasing number of proprietors, the revival of enclosure of the common lands, by whose use the tenant class had been able largely to subsist, the reduction of large number of tenants and small owners to the status of wage-earning agricultural labourers and the removal of many persons from agricultural employment altogether. It began towards the close of the 17th century and had run its course substantially by 1845.*

In England in the 18th century, the rise of capitalism is a fundamental economic fact; and

*Ogg: op. cit. p. 118.

not merely the growth of capitalism itself but also the social and political power of capital. By the end of the 18th century landowners began systematically to employ capital in the improvement of the soil and in experimentation with new crops and methods of tillage. It was expected to yield a certain percentage of profit; and on account of this it prompted the application of science and experience to the processes of agriculture, involved the substitution of machines for men, thereby limiting the demand of agricultural labour; set up a competition of large-scale scientific tillage which the small landowner was unable to meet and stimulated still further concentration of land in large holdings.* This application of capital to agriculture was the first feature of the agricultural Revolution in England.

The *second feature* of the Agricultural Revolution was the improvement in agricultural technique. The stimulus to this came from a rise in prices due to the increased demand of the agricultural crops from the new towns as well as from the army on account of the Napoleonic Wars. Large-scale production was resorted to; agricultural machinery came to be used; new

*Ogg: op. cit. p. 122.

types of plough, waggons and manures were utilised and scientific research in agriculture started. Many thousands of acres of moorland, heath and fen were drained; scientific rotation of crops became a general practice and the wasteful practice of permitting arable land to lie fallow every third year was discontinued. The progress of metal working and machine building permitted the introduction of new kinds of labour-saving devices: notably, the horse-propelled threshing machine which was placed on the market shortly before 1800. Farmers' clubs and cattle-shows multiplied. In 1838 was organised the Royal Agricultural Society and in 1842, the Agricultural Chemistry Association. All these factors brought about a complete revolution in agricultural technique.

The *third feature* of the Agricultural Revolution was the revival of enclosure of common lands for farming after the middle of the 18th century. Special parliamentary legislation was required for the purpose; but as the Parliament was dominated by landlords such legislation could be very easily secured. Besides enclosures were being advocated by economists notably by Adam Smith, who claimed that the only

possible relief from the intolerable waste of commons and open and scattered strips lay in large-scale capitalistic farming. Last of all, the Government itself was in favour of enclosures. In 1801, a statute was enacted to make easier the passage of private bills for enclosure on voluntary basis which had continued all through the 18th century even among the peasant farmers. An Act of 1836 went further, and made it possible with the consent of two-thirds of the persons interested to enclose certain kinds of common lands, without specific authorisation of Parliament. A general Enclosure Act of 1845 created a Board of Enclosure Commissioners authorised to decide upon the expediency of the proposed enclosures and to carry them into effect, if approved.* The chief object of the measure was to assess the cost of the enclosure process as well as to ensure added protection to the rights of the poor.

The enthusiasm for the enclosures of commons and consolidation of holdings was so deleterious that, even when the prices were very high and the value of land soared to a height of forty times its rental during the French wars,

*Ogg: op. cit. p. 126.

the industrial and commercial magnates eager to acquire the status and prestige, which the ownership of land conferred in the political and social field, purchased land freely. This was due to the great profitableness of the new methods of farming and their national importance for food supply to the growing urban population during the French Wars. The price of wheat between 1793 and 1815 rose to unprecedented heights and the continental blockade of Napoleon prevented imports from the Baltic countries and harvests were bad, (1797-1801) and (1810-13). Thus, increased demand for products, to feed the growing industrial and urban population; the introduction of scientific methods and capitalistic farming to meet it and the exigencies of the Napoleonic wars made the enclosure of the commons inevitable and that led the Government to give every encouragement to it after a fair compensation to the small farmer. The depression that set in after the wars (from 1815 to 1830) caused fall in prices and rendered agriculture a mere speculation. The small farmer on account of his inability to withhold stock or wait for a better turn was crippled and was compelled to sell his holdings which were purchased in

alarming proportions by the big landholders. Public discontent and resistance could not stem the tide of the enclosure movement.

The *fourth feature* of the Agricultural Revolution was concentration of land-ownership. The period 1793-1850 was a period of victory of the large farms. Small free-holders very generally gave way to capitalist landlords. By numerous marriages between the new capitalists and the old land-owning families, the consolidation of estates was carried still farther.* By 1835 the process of concentration might be said to have passed through its most important stages, with the result that England became a country in which landholdings were of the largest average size and in which the proportion of cultivators owning the soil upon which they worked was the smallest.

Fifthly, this development brought about the disappearance of the yeomanry and of the small tenants from English Agriculture. Their methods of production were inferior. The fluctuation in prices hit them hard. Enclosure took away from them the advantages of wastes and common lands. This system involved

*Ogg: op. cit. p. 129.

unnecessary expenses of transport. They had no longer any bye-income on account of the Industrial Revolution. Their capital was insufficient, and, even where it was available, the size of their field checked the application of improved methods. Therefore, the small tenants began to work as wage-earners; and, since their number was fairly large and they were averse to migration to cities, their wages were considerably lower than of the factory workers.

The incentive for the agricultural revolution was provided by a rapidly rising demand for farm produce. England's numerous wars, the growth of her woollen industry and other manufactures, the swift expansion of her commerce and merchant marine, the remarkable increase of her population (exclusive of emigration to colonies, it almost doubled in the 18th century) and a steady rise in the price of agricultural produce, after 1760 all these stimulated the production of foodstuffs and raw materials and the improvement of agricultural practice.

For many years after 1689 the supreme political authority in Great Britain was a parliamentary oligarchy of landlords and commercial and banking magnates which enjoyed a great

social prestige and wielded very real economic power. This oligarchy, particularly its Tory element, naturally favoured agriculture and the great landlords. Immediately after the "Glorious Revolution" this oligarchy, while increasing the tariff protection to home grown grain, adopted a new policy of paying to the landlords from the national treasury a "bounty" or money premium for every bushel of wheat which they exported from the country when wheat was selling for less than 6 shilling a bushel. This policy was continued and developed during the nineteenth century by the "Corn Laws" which were intended to stimulate the growing of grain in Great Britain, to raise the price of foodstuffs, and thereby to add to the riches of rural landowners. Thus, the increased demand for foodstuffs appeared at the very time when the "Corn Laws" and the Navigation Acts, were protecting the British market from foreign competition. Hence, the incentive to the English farmer to increase the output of his land.

But to increase agricultural production meant the adoption of more efficient, more intensive or scientific methods of farming which required for

its successful operation a large amount of capital, big holdings to make application of capital profitable and experiments possible, the courage and imagination to break with centuries of deeply-rooted agricultural tradition. This was not easy for the ordinary small farmer or tenant farmer. Hence, the leadership in effecting revolution in agricultural technique was taken by "Gentlemen farmers" i.e., by wealthy landlords (nobles and country esquires) who possessed all the requirements of the capitalistic farming and made a hobby of the "new farming" in this period.

The landed aristocrats who were supreme in Parliament in this period again took advantage of their position and promulgated a number of "Enclosure Acts" for consolidation of holdings privileging this or that nobleman or esquire to enlarge his private estate by depriving tenants of their customary rights to common holdings. Seventy enclosure acts were passed between 1700 and 1760, and during the first 3 years of the reign of George III (1760-63) 1,356 such acts were enacted.

At the top of all this came the agricultural pioneers and enthusiasts who carried on an

extensive propaganda through the pulpit, the platform and the press for the adoption of the "new agriculture". Chief among these were Jethro Tull (1674-1740), Lord Townshend (1674-1738), Robert Bakewell (1725-95) and Arthur Young (1741-1820).

Jethro Tull and Scientific Cultivation:—After his French and Italian tours where he observed the careful cultivation of vine, he applied himself mainly to the prevention of waste and to giving the plant 'a free field' with a view to increase the yield of the crops on his ancestral estate. The old practice of sowing broadcast *i.e.* to sow the grain by scattering handfuls of seeds was uneconomical and prevented the hoeing of the soil in between the plants or keeping weeds from growing amongst them. He proved through his experiments that thin sowing and constant cultivation produced the best harvest. Therefore he asked his labourers to sow in rows leaving sufficient space between the plants to allow a good root run for them and to prevent the impediments to their growth by weeds. On the protest of his labourers against this unusual practice and enhanced labour he invented a drill in 1701 and a machine for sowing .

clover which reduced the amount of seed required, from 10 lbs. to 2 lbs. per acre. The drill planted the seed automatically in the desired way and a horse-driven hoeing machine for cultivating the soil around the plants was also invented by him. The result was a large increase in the yield of his crops. The novel methods were published by him in his book entitled 'Horse Hoeing Husbandry'. In spite of the ignorance and stupidity of the farmers and their use of wretched implements the average produce of wheat as a result of this drill husbandry was 25 bushels and acre in 1770 as compared with 6 to 10 bushels as under the old system.

Townshend and Rotation of Crops:—Contemporary with J. Tull, Lord Townshend having quarrelled with his brother-in-law Walpole, forsook politics for agriculture. After an active political career he retired to rural life and devoted himself exclusively to the management of his broad acres. He adopted Tull's methods of drilling and hoeing, reintroduced the practice of marling on the light lands, and made extremely important experiments in the rotation of crops. He devised a novel system of crop rotation, planting wheat, turnips, barley or rye, and clover

or beans in successive years. Through this four-year rotation and the use of better fertilizers he more than doubled the average production of the mediæval three-field system (24 bushels of wheat per acre as compared with 6 or 10 on the open fields). Through his efforts the heath near Norwich was enclosed by 1760, a good turnpike road was constructed across it. Through its cultivation according to his plan, its yield increased; and rent earned was 15s. per acre (an amount ten times greater than its value before the change). The rotation of crops was specially valuable for cultivation because it not only prevented the impoverishment of the soil but it also rendered unnecessary the year of fallows and of no returns.

These new methods, however, could be carried on only on enclosed fields which enabled the more enlightened farmer to make experiments and shape his practice without any let or hindrance. Hence, after having been comparatively rare for 150 years enclosure and consolidation of holdings showed a revival during the first half of the 18th century so that with a full appreciation of Tull's and Townshend's innovations the movement gained momentum. The land already

devoted to crops was consolidated, and as the population grew and the continental exports ceased on account of the French Wars, much waste land was brought into cultivation. The open fields, still existing, were hedged and enclosed and by 1850 the English landscape took on its modern appearance. Between 1770 and 1780 and 1800 and 1820 enclosures proceeded at an abnormal rate. The first of these periods coincided with the rapid development of the textile factories before the employment of steam; whereas the second coincided with the Napoleonic Wars and the later phases of the Industrial Revolution.

Another "gentleman farmer" was *Robert Bakewell* who won a special distinction as a pioneer in the scientific breeding of farm animals (cattle, horses and specially sheep). As a result of his efforts the average weight of calves increased from 50 lbs. in 1710 to 148 in 1795; of heaves from 370 lbs. to 800; of lambs from 16 lbs. to 50 lbs; of sheep from 28 lbs. to 80 lbs.

This new agriculture had a fascination for the English noblemen of the 18th century and became very fashionable at court and among the parliamentary oligarchy. George III insisted

that Tull's methods be explained to him at length and his neglected wife patronised the publication of *Horse Hoeing Husbandry*. George III farmed a flock of Merino sheep; experimented with stock breeding and established a model farm at Windsor.

. But the most influential populariser of the new agriculture was *Arthur Young* who wielded the pen rather than the hoe. He was unable to make a living on his own landed estate but taught others how they could enrich themselves from farming. He lectured on the 'New agriculture', urged members of Parliament to forward it; and edited a monthly magazine "Annals of Agriculture" for the propagation of its principles and published his "Tours". It was a spirited crusade which A. Young waged on behalf of agricultural change through the press, the pulpit and the platform. He argued rightly that more produce from land meant higher rents for the landlord, larger income for farmers, better wages for labourers, and more home grown food for the whole nation.

Young's propaganda and the exigencies of the new agriculture necessitated the protection of the British agriculturists against foreign

competition and the transfer of land from common to private ownership, and from a large number of tenants and small farmers to a small number of capitalistic nobles and gentlemen. Such demands could easily be met by these very nobles, for it was they, who devoted to the 'new agriculture' and imbued with Arthur Young's convictions, could utilize their predominant position in Parliament to enact the 'Commons Laws' and 'Enclosure Laws' and as we have seen above they did so. The process of enclosure reached gigantic proportions in the reign of George III. It was a significant aspect of the British agricultural revolution of the eighteenth century.

Results :—The result of this change in agricultural practice was the decline of Yeomanry—the small farmers. At a time when the water-frame of Arkwright was taking spinning out of the hands of those who followed the occupation merely as a supplement to agriculture and was thus making it increasingly difficult for them to get a living the exigencies of the new agriculture and the pressure of food supply necessitated large farms and greater amount of capital. So that, howsoever the small farmer might desire

to adopt these methods, they were beyond his means. It was still more impossible for him to compete with the newer methods, when his domestic industry migrated to factories; and as the enclosure of common lands often deprived him of the means of feeding his stock, he was driven to seek a living in other ways. He became either a tenant farmer, a farm labourer or a factory labourer or migrated to the colonies. It has been estimated that in 1688 there were 1,60,000 small freeholders in England and before the enclosure the landless labourer was rare. Most of them possessed a share of the common fields or the right of common pasture. This unfortunate effect of the agrarian changes was foreseen by many, and Arthur Young recommended the reservation of sufficient land to support a cow and its security by the parish, while Lord Winchelsea pleaded that each cottage should possess a garden. But very few landlords accepted the suggestion and gradually the yeoman was starved out or bought out, and he has only in recent years been partially replaced by men of a similar class who, having acquired a little capital, are endeavouring to make a living on the soil. It is true that farming had

become very profitable in this period on account of the French Wars and the Industrial Revolution but only because it was carried on by the new methods. The result was a rural depopulation, destitution and poverty of the masses, and an abnormal growth of pauperism. It left behind three classes : the landowner, the farmer and the labourer.

Thus, the agrarian revolution established the triumphant victory of the big farm over the small one. It was a losing battle for the small farmer on all fronts. He could not command the necessary capital to experiment with new crops and new methods of tillage and to purchase fertilizers and tools etc. and acquire more land for their profitable utilisation. He could not produce meat or dairy products on a large scale, his methods were wasteful and prevented the application of scientific ways and the getting of the full returns from the land. His open and fragmented strips prevented also the scientific rotation of crops, cross-harrowing and cross-ploughing, wasted a lot of time in going from field to field and a large area of land in too many boundaries, bulks or head-lands and caused incessant litigation. Although he required a

small capital, economised labour by employing his family, and was a valuable asset socially yet he was economically inferior, had outgrown the stage of his necessity and public opinion had become hostile to him. The big farmer with his greater capital, better seed, better implements and machinery, better breeds of cattle, better fertilisers, and scientific food for his cattle could produce more grain and meat and that too more cheaply. He had a large surplus, could afford to wait and experiment and command better transport and other marketing and financial facilities. He could effect great improvements and influence the Government to pass necessary measures for the improvement and protection of his husbandry (*cf.* Corn Laws). He could command a large labour force which became superfluous and abundant on account of a contemporaneous revolution in both agriculture and industry. Even the landlords preferred big tenants who could pay higher rents and pay them more regularly and who could not be crippled financially so easily as the small man by an untoward event like the death of a bullock or cow. Moreover, the big

farmer can withstand violent fluctuations in prices which the small man cannot do.

It is true that the peasant farmer could take to dairy-farming, horticulture and poultry-keeping with advantage but to be successful it must be a very intensive culture—a thing which was not known to the 18th century small farmer and which he could not undertake with his scattered strips. He could enclose his strips to apply the new methods but unfortunately for him “the change came at a time when there was a diminution of family earnings, uncertain seasons, very high poor rates and wild fluctuations in prices. The Government engaged in fighting Napoleon, with its cloth barred out of Europe by the continental system, with its ships being sunk in large numbers, was in no position to initiate co-operative societies, provide credit or train teachers to instruct the small man in the new methods, even had they known these modern expedients, which they did not”. The small man was threatened on three sides: “If he sold his surplus, his poor grain and miserable scraggy beasts fetched a low price in competition with the good wheat and fat bullocks of the large farmer. If he were to enclose strips he had to

pay for the cost of the enclosure surveys and hedge his land; his commons were at the same time being taken in for arable and he lost not merely his pasture rights but he had to buy coal to replace the fuel gathered freely from the wastes, and this happened at a time when he was losing his weaving and his wife her spinning, as both were being taken over by the factories, more especially the spinning.”* The condition of farm labourer—inefficient and superfluous—was most hopeless and he had to accept low wages and subsist on doles from the Poor Law authorities.

CHAPTER VII

ENGLISH AGRICULTURE (1850-1914)

The Good Years:—The period from 1850 to 1873 is termed as the “Golden Age” of English agriculture because of the improved conditions of work, brisk employment, intensive production and trade. The coming of the railways and the steamships removed the shackles of centuries and conquering geographical barriers stimulated exchange on an unprecedented scale. The gold discoveries of Australia and California raised prices and promoted new undertakings. English agriculture also felt the impact of the new technique of production and distribution and machinery began to come into use after 1850. Wages rose specially in the metallurgical industries and although prices were soaring, wages out-stripped them. The application of machinery, however, led to large scale capitalistic farming and a good deal of farm labour was rendered superfluous. The small peasant farmer known as the yeoman, lost on both ends. On the one hand he lost his hold on agriculture because the paucity of capital

with him prevented him from benefiting by the application of machinery and its application by big landlords prevented him from getting a job on the large-scale farms. He was therefore reduced to penury, displaced, and had to seek employment in the railways, the coal mines, the expanding engineering trades and factories. This disappearance of the yeomanry on account of internal causes was accentuated by an intensified foreign competition consequent on the railways and the steamships. But all this feverish activity in production and trade changed in 1873 to 1886. The boom was followed by an inevitable crash and this period is known as the Great Depression. Although the depression enveloped the world as a whole, it affected English agriculture very severely. A general drop in prices of all commodities resulted from fundamental changes in the currency systems of the world : the triumph and universal adoption of the gold standard and the heavy fall in price of silver, which was demonetised or restricted in coinage.

The Great Depression :—After 1875, therefore, began a period of agricultural decline. Manufactures began to attract the attention o

the English in an increasing degree. In 1876-77 poor harvests, a cattle plague and sheepprot involved the agricultural classes in dire distress. In 1882, a Government Commission testified to the great extent and intensity of the distress which had fallen upon the agricultural community. Grazing pastures increased in area, and in spite of the improved technique, there was a large falling off in the output of agricultural produce. Foreign competition, chiefly with U.S.A., and generally with India, Australia, Argentina, Southern Russia and the Baltic brought about a fall in prices with the result that agriculture became an unprofitable business. Big landlords once more began to revert to pastures. There was a fall in rents. Landlords and tenants lost their capital. There was a general atmosphere of uncertainty. Thus, during the period, 1874-94, there was a general decline in agriculture and England became, in the main, dependent upon foreign countries for the supply of foodstuffs.

International Competition and Agriculture in England :—The rapid decline of agriculture and the increased activity and prosperity of industry and commercial sections of the population due

to the "Industrial-cum-Commercial Revolution" directed capital from agriculture into manu-
factures, transport, and engineering trades which were the most lucrative ventures. The dominance of the Parliament by industrial and commercial magnates had led to the adoption of a policy of free trade in the previous periods and the removal of the duties and restrictions on trade. The onward march of industrial, commercial and naval prosperity of England after 1846-49 had proved beyond doubt the boon of the free trade. But the evil effect of this policy of *laissez faire* began to be felt only after 1873 when the prices had begun to tumble down and the railway and the steamship had girded the whole world into one closely organised economic unit. The new nations coming to power laid emphasis on national economy and the older ones being freed from internecine troubles, wars, tariffs and tolls, began to organise their productive and distributive machinery for competition. To protect their infant industries they erected tariff barriers and granted subsidies and bounties to encourage exports and production in both agriculture and manufacturing. England was the only free

market and she had become dependent on foreign supplies of raw materials and foodstuffs after the Industrial Revolution.

Therefore the period of depression witnessed the exposure of the English markets to the full blast of international competition. The free trade policy left the English farmer entirely unprotected, and, it was too much for him with his diminishing hold on his industry to withstand the onslaughts of this intensified foreign competition. But the most fundamental cause of the agrarian decline was the commercial revolution caused by the mechanical transport: the railway and the steamship but for which international competition in bulky primary products would have been well nigh impossible.

The depression in agriculture was the direct outcome of the opening up of the "Middle West" in the U.S.A. and the Prairies in Canada. The unlocking up of the continental areas by railway and steamships led to continental inland expansion and made the exploitation of vast virgin lands a commercial possibility. The railway and steamship by enabling the export of products to long distances attracted both men and money for colonisation of these territories.

After the Civil War a great era of railway construction began in the U.S.A. and later on in Canada which opened up the prairie lands. The railways were built as speculations and competed against one another at cut-throat rates to carry the grain and the low rates acted as a sort of bounty on export. Similarly the competition of steamer and sailing vessels lowered sea freights and a great stream of American exports began to pour into Western Europe including England. The continental powers, as adverted to above, dyked up against this flood of American wheat with tariffs and it was diverted into the great free market of the U.K. and produced a great depression in agriculture. Then again, the railway and steamship net spread to India, Australia, South Africa, Russia, and Argentina and enabled these countries also to compete in the free market of England.

On the top of wheat imports came meat. To the railway and the steamship cold storage came as a powerful adjunct in 1880 when the Newzealand company developed the refrigerator which led to the importation of large quantities of perishable commodities like meat and dairy products from Newzealand, Denmark, Australia, .

South Africa, Argentina and other continental countries. Imported mutton, beef, pork, ham and bacon and meat together with cheese and butter deprived the English agriculturist of his profitable dairy farming and meat production. The American meat combines started and made such profits out of the sale of by-products like hides, bristles, horns etc. that they were able to dispose of the actual meat at very low prices. American beef and pork were soon reinforced from Australian and Argentina mutton and the British cattle-growers as well as wheat producers suffered severely from competition as far as second and third rate meat was concerned. Cold storage steamers and railways facilitated the transfer of frozen or chilled meat to long distances. "The chilled beef followed the wheat and the frozen mutton from Australia coming in in the eighties, completed the rout."* The result was the great depression and reconstruction of British agriculture.

Sir T. Palgrave estimated the loss of capital and profits in English agriculture between 1875-1905 at £1,600 millions. Confidence and enterprise weakened, area under wheat con-

* Knowles.

tracted, alteration of arable land into pasture increased and improvements like drainage were checked. An immensely large number of farmers became bankrupt, lost their capital, and in spite of decreased incomes and reduced value of estates they had to remit 50% of their rents. It was, however, the yeoman and the small tenant farmer and the labourer on the farm who were the hardest hit. Agricultural wages declined heavily in a period in which wages were rising in other industries. The large imports of wheat flour caused a wholesale destruction of the local flour and corn mills.

RESULTS—(A) A Change in industrial and commercial policy—the abandonment of *Laissez-faire* in colonisation, commerce, industry and agriculture: constructive imperialism. The encouragement and subsidisation of the study of scientific agriculture in the tropics. Increased state control of industry and social conditions. (B) Fixing of fair rents and changes in land tenures. (C) The creation of the Board of Agriculture in 1889. (D) An elaborate system of agricultural education. (E) Small Holdings Act and Allotments Acts of 1907.

(A) The direct outcome of the Great Depression was a great change in English Policy in the period from 1886-1914; which witnessed the abandonment of *Laissez-faire* in colonisation, commerce, industry and agriculture. England began to concentrate on the development of

inter-imperial trade. With the coming of Joseph Chamberlain to the Colonial Office in 1895 a new constructive imperialism was organised. Colonial conferences which began in 1887 after Queen Victoria's Jubilee became a regular feature. The linking up of the self-governing Dominions with the mother country was strengthened by subsidizing of inter-imperial cables, enlarging postal facilities and by appointing Trade Commissioners for the development of inter-imperial trade. Colonial Government, and railway stocks were made trustee stocks and thus a financial preference was given to the colonies in return for preferences on British goods in the colonies, after 1897. To save the West Indies from an utter collapse England gave up her free trade attitude and joined the Sugar Convention in 1902 and prohibited the import of bounty-fed sugar from Russia, Denmark, Spain and Argentina. This led to the suspension of their sugar bounties by France, Austria, and Germany. Inter-imperial economic ties were further strengthened by subsidizing the building of railways in the Tropics, by encouraging scientific research in agriculture, mycology,

entomology etc. to fight against diseases of plant as well as of human beings. Scientific agriculture was also encouraged by experimental and demonstration farms to improve the quality of sugar-cane and cotton. The tropical and sub-tropical territories are now studded with agricultural experimental stations and laboratories subsidized by the Colonial or Home Governments. This change in attitude led to a new orientation of colonial policy and to an increased control of industry and social conditions by the State through industrial legislation and social reforms. The period in fact witnessed a plethora of Committees and Commissions and of Parliamentary statutes like the Shop Hours Bill of 1893, the Early Closing Bill of 1904, the Factory Act of 1891, the Workmen's Compensation Act of 1906, the Old Age Pension Act of 1908, the Unemployed Workmen's Act of 1905, the Compulsory Unemployment Insurance Act of 1911, the Labour Exchanges Act of 1909, the Truck Acts, the Trade Boards Act of 1909, and the Mines Acts of 1908 and 1912, the Education Acts of 1902 and 1906, the Juvenile Labour Exchange and the Children's Acts of 1903 and 1908 and the Trade Disputes Act of 1906.

(B) The growing power of the state in agriculture is also very remarkable. The unfettered import of food was disastrous to Irish agriculture where after 1880 the state fixed "fair-rents" for a term of 15 years and after 1885 began to assist the tenant financially to enable him to buy his land-lord out. Land or Estate Commissioners fixed the purchase price and advanced the money which the purchaser had to pay back in instalments. After this change of tenure to make the farmer able to pay his way the Department of Agriculture and Technical Education was set up in Ireland in 1899. In Great Britain the reaction from free trade in agriculture has taken the following courses :—

- (i) The Board of Agriculture was created in 1899 to prevent cattle diseases and to help the farmer by giving information and protecting him from unfair competition. It does so by administering acts to safeguard the farmer from adulterated fertilizers and foodstuffs and from unfair competition.
- (ii) An elaborate system of agricultural education has been developed and subsi-

dized; scientific research has been organised and the whole of the country has been divided into agricultural administrative areas each of which contains experts to advise the farmers on matters of cattle, crops and forestry.

- (iii) Attempts have been made to re-establish the peasant farmer. The County Councils were obliged by the Government in 1907 under the Small Holdings and Allotment Acts to acquire land compulsorily and sell or relet it to small tenants. In case of default by the Councils the Government could act.
- (iv) Government has been giving financial help to the peasant farmer by advancing money for preliminary expenses, by subsidizing co-operation to help the farmer overcome the disadvantages of small-scale production. The advances are repayable in small instalments over a certain period. The general result of this policy is that the public authorities have become one of the biggest land-owners in England.

Reconstruction and a great Social Experiment:—

After 1895, the interest in English agriculture revived and efforts were made to remedy the causes bringing about the agricultural decline. The main problems of reconstruction were to effect a wider distribution of land holding, to increase the yield of the land; to protect agriculture and its allied industries against foreign competition by tariff; to eradicate the evils of great estates and absentee-landlordism and to make rural life more attractive. The wider distribution of land-holding also comprised the provision of cheap and adequate credit and efficient marketing facilities to the small farmers and reforms in tenancy. Settlement by entail which prevailed even now in one form or the other was one of the three factors (capitalism and enclosure being the other two) which sustained the big estates. This system of settlement by entail was reformed in 1882, by passing the first of a series of Settled Land Acts giving tenants for life, and many other limited owners, powers of sale and of leasing and these powers could not be restricted by settlers. Allotments were, once more encouraged. In 1818, the local poor law authorities were empowered to pur-

chase or lease land for this purpose. During the middle of the 19th century, several enquiries, notable one in 1843 resulted in recommendations of further legislation to create allotments. For the time being, however, the Parliament refused to act upon this; but in 1887, there was passed an Act, which was the first measure in which the principle of compulsory acquisition was admitted in regard to other than charity lands. The local sanitary authority was empowered to acquire by purchase or hire land suitable for allotments and there was provided a process whereby owners might be compelled to sell for this purpose. In 1894, the power was transferred to the newly created parish councils. The aggregate number of allotments rose from 2,46,398 in 1873 to 5,79,133 in 1895.* Under the Small Holdings and Allotments Act of 1907, it became obligatory on the council of any borough to provide a sufficient number of allotments to meet the local demands and for this purpose lands might be bought or rented voluntarily or compulsorily and either within or without the councils' area of jurisdiction.

The advantages of allotment were many but

they hardly more than enabled the labourer to obtain a desirable addition to his wages or to the food supply of his family. In 1890, however, a parliamentary committee appointed to suggest measures to bring back small proprietors and tenants, recommended specific steps for the encouragement of small holdings. In 1892, Parliament passed the Small Holdings Act by which County Councils were authorised to borrow money from the Public Works Loan Commission to buy land and to sell it in parcels of 1 to 50 acres on the instalments system. This measure from which much was expected remained practically inoperative, since upto 1908, only 850 acres of land were purchased under it. In 1907, was passed the Small Holdings and Allotments Act which we have discussed above. It yielded important results. Upto the close of 1914 applications had been received from 46,660 individuals and 96 associations and the total quantity applied for amounted to 7,82,286 acres. But most of the persons getting land under this law became renters and not owners.

Besides this State measure private individuals and many small holdings societies were making

efforts in the same direction. Within the past 40 years, there have sprung up several organisations which have for their object the increase of number and promotion of interests of small holders. Under the name of the National Fund and the Home League, some of these societies developed in 1911 into federations. The Allotment and Small Holdings Association of 1893 was expected by 1912 along with the bold efforts of the Government, to bring the rural population once more closer to agricultural pursuits.

Co-operation, which was practically non-existent in England so far as agriculture was concerned, began to be utilised more and more as an agency for rural improvement and in March 1913 there were in England and Wales 478 Co-operative Agricultural societies having a membership of 48,000 and an annual turnover of almost £2,000,000. Closely related to this is the matter of credit societies. Here again, England was behind the continental countries. In 1915, there were 45 Co-operative Credit Banks as compared with 17,000 in Germany. In the matter of agricultural education, a more substantial progress had been made. Since the

creation of the Board of Agriculture in 1889, the supervision of agricultural instruction has been divided between that body and the Board of Education.

Finally, the National Agricultural Labourers and Rural Workers' Union has effected the organisation of agricultural labour on the principles of trade unionism and is gradually bringing about a rural regeneration.

Other changes which have been suggested for the improvement of English agriculture are of a more controversial nature. One of them is the "Nationalisation of land". Another is the inauguration of "more stringent rating and taxation of land values." A third was the imposition of protective duties on the imported agricultural products. The first of these propositions professed by the socialists is, yet only an academic question. Proposals relating to land values look specially to rating and taxing of undeveloped lands in such a manner that owners will be obliged to throw them open and thus increase the opportunity for laying out small holdings. Some progress in this direction has actually been made under the Finance Bill of 1910. The third proposal "received most

explicit and forceful statement in the course of the historic crusade inaugurated by Joseph Chamberlain in 1903”.

The Liberal Party, however, stood firm by the principle of free trade. In 1912 was appointed a semi-official enquiry committee to which was given the task of investigating wages, housing, and general laws, allotments and conditions of land tenure and land acquisition. Out of the leaves of its comprehensive report Mr. Lloyd George formulated his plan of reforms directed towards two main ends:—

(i) the betterment of the lot of rural population.

(ii) the increase of agricultural production.

The first was to be attained by immediate action. The second was made slowly and perhaps largely as a consequence of the amelioration of rural labour conditions. A ministry of land was to be established. Under it were to be placed local commissions with power to purchase land needed for the more rapid multiplication of small holdings, for reclamation and for afforestation and with power also to enquire into conditions for improvement, to compute compensation and under certain conditions to fix rates.

It was also proposed that agricultural labour should be given protection through the medium of a minimum wage law with the provision that the minimum wage for different areas were to be fixed by the local commissions. The commissions were to have power further to regulate the hours of labour. A national survey of housing conditions was also to be made. The economists were, however, in favour of protective tariffs for bringing about agrarian reforms. When the controversy between the parties was at the highest there came the Great War and, therefore, all proposals of reform had to be shelved for the time being.

CHAPTER VIII

ENGLISH AGRICULTURE AND AGRICULTURAL POLICY IN RECENT YEARS

The Great War and English Agriculture:—In the decade before the War under the spur of foreign competition a revival of agricultural industry based on Small Land Holdings Act of 1907-08, co-operative credit and agricultural research was going on. English farmers, however, never recovered from the great agricultural depression and the Death duties had been breaking up large estates. Much of arable land, therefore, had gone permanently to grass. English agriculture, as pointed out by Sir Thomas Middleton, produced food sufficient for the population for 125 days of the year, for rest of 240 days English people depended on overseas supplies from the Empire and foreign countries. The land reforms of the Liberal Party of 1913 based on the transformation of landownership and rural conditions could not be given effect to on account of the outbreak of the war.

It is true that the landlords and farmers on account of the increased demand for foodstuffs

had very prosperous times by adjusting English agriculture to the changed conditions of the world market, but still the rural decline of previous generation persisted. The area in 1914 was $4\frac{3}{4}$ m. acres less than in the seventies and the number of labourers had fallen by hundreds of thousands. The proposal to fix a minimum wage for agricultural labourers in the land programme of 1913 had scared many farmers and agriculture was lacking modern equipment and scientific knowledge. At the time of the war English agriculture supplied only $1/5$ of wheat and less than $2/5$ of other food supplies. For the rest England was dependent on imported food supplies from abroad. In the words of Sir T. H. Middleton the British Farmer in 1914 "was no longer the warden of the nation's food, and agriculture, far from occupying the 'lordly' position among our industries accorded to the 'loaf-provider' when the 19th century opened, had become a minor contributor to the food supply, and to the country's wealth."

The Great War of 1914-18 by cutting off the overseas supplies of foodstuffs and raw materials on account of the shortage of shipping occasioned momentous changes in the status and technique

of English agriculture. As a result of scarcity and high prices the agricultural depression gave place to an artificial and unhealthy boom. When after 1917 on account of the ruthless submarine warfare of Germany it became impossible to have adequate quantities of these overseas supplies the gravity of agricultural situation was brought home to the British Government, and when they realised the dangerous consequences of extreme dependence on foreign supplies, they inaugurated an era of state regulation and control of prices and the promotion of increased output of primary products. The status of agriculture in the national economy made people agree to the imperative necessity of making England so far as possible self-sufficient in matter of food-supplies. The truth of this statement is borne out by the fact that the trend towards agricultural protectionism in the traditional home of free trade and individualism became so pronounced during War and in the post-war period that agricultural production was not only sheltered by the famous Mc-Kenna duties and the Safeguarding of Industries Act, but subsidies and bounties began to be granted and a regime of mean guaranteed price for wheat was

inaugurated; but sugar was subsidized as also was sugar beet etc.

At the outset the necessity of providing food supplies for army and the civil population had led to the augmenting of agricultural production at home, but this was seriously hampered by the drain of farm labourers from the farms to the theatres of war. This would have led to a greater decline in the production of food supplies. "had it not been for the patient drudgery of thousands of women, old men and boys" who replaced the adult male worker on the farms. The shortage of imports from abroad due to the increased freights and the preoccupation of shipping in the transportation of war materials and the consequent rise in agricultural prices, (in 1917 they were 120% above those of 1914) offered a very splendid opportunity to the English farmer to set his house in order, but the traditional *laissez-faire* policy stood in the way of the Government to increase food production by state regulation. In spite of the clamours of the farmers in 1915 for a Guaranteed minimum fixed price for wheat, the Government stuck fast to the *laissez-faire* policy and merely carried on a propaganda to increase production by appealing

to the patriotic and national sentiments of the people. The withdrawals of large numbers of rural labourers to the army and to the manufacture of war materials created a shortage of labour supply; and the intensity of the situation, as said above, was aggravated by the German submarine campaign. Therefore, in spite of the rise in prices arable area declined considerably, and especially under wheat and potatoes. At this movement on the recommendation of a Departmental Committee (under Lord Milner) on food supply and prices, an Act was passed in 1916 which created the office of Food Controller at the head of the Ministry of Food with a network of County and District Committees under it. The Board of Agriculture was vested with very wide powers for securing better supply of foodstuffs and their distribution. The state regulation became very extensive as is evident from the extensive powers which the Food Controller under the Defence of the Realm Acts was given to regulate and direct production, consumption, transportation and storage of all articles of food, including animals alive or dead, requisitioning any article from any owner on his own terms, to take possession of any factory and

workshop producing food for sale, to demand information re : stock and prices of food supplies and to encourage in all feasible ways the production of food. Under these wide powers prices were fixed in the interests of the consumers, exportation of certain articles was stopped, the use of certain grains for human food was restricted; the flour mills were taken possession of, and some important articles of food were rationed. A Food Production Department was established to serve as a clearing house for farmers' requirements and as a general staff in the food campaign.

The majority of the people were against this policy of state regulation and control and the Food Ministry having failed to bring about a large improvement was subjected to severe criticism. It was concerned mainly with economy in consumption and distribution of food and to that effect it appealed to every one in 1917 to limit his purchases of bread, meat and sugar to fixed quantities, and excepting bread a scheme of compulsory rationing was adopted in case of meat, sugar, butter, margarine and lard. Later on a Corn Production Act was passed in the same year to establish minimum agricultural wages fixed by the Board of Agriculture on the recom-

mendation of the District Committees composed of employers, workmen and the public representatives; and secondly, to put into effect guaranteed minimum prices for wheat and oats for six years." The Board of Agriculture was also given the power to cultivate or to authorise the cultivation of unoccupied lands. The result of this was the virtual subsidising of agricultural production; for it had been provided that whenever the average price per quarter fell below that fixed under the law, the occupier of the land was entitled to payment by the Government equal to four times the difference per acre in the case of wheat and five times in the case of oats. As a result of all these measures the arable acreage between 1916 and 1918 increased by 14 lakh acres, but the Food Ministry had expected to increase it at least by 26 lakh acres. The explanation of this is found in the fact that the equipment of farmers in agricultural machinery, manures and labour was notably deficient, and therefore, in 1918 the food production programme was given up, when the German offensive in the spring of that year became very strong. Still it must be said to the credit of the Food Ministry that they had a notable achieve-

ment in stimulating home-grown supply which was enough to meet the requirements of 155 days of the year, and according to Sir Thomas Middleton, no country did so well in the same period. The Food Production Department supplied in 1918 about 1,22,000 men and 3,16,000 women to work on the farms and huge quantities of fertilisers and implements. In spite of labour difficulties and bad weather 54% more wheat and 68% more potatoes were produced in 1918 than in 1916. The total productive acreage was 12,399,000 in 1918. At the end of the war, therefore, English agriculture had 13,40,000 acres more than in 1913. A very remarkable change effected during this period was the turning of over 3 million acres of grass land into arable area and had it not been for the state regulation and subsidy to increase the home supply, thousands of Englishmen would have suffered from lack of food. A total of 4 million tons of corn and potatoes more than in 1911-14 had been produced. The period also saw an immense increase in the allotments or small plots which by wide distribution of local food production not only relieved traffic but also contributed about 1 million tons of more food in 1917.

This success had encouraged a number of people to dream that they would be able to make the country self-sufficient in the matters of foodstuffs provided the Government followed a judicious policy of state subsidy and regulation. A great stimulus, it was expected, would be given to the returned soldiers from the battle fields to flock to the land and that agricultural wages would remain sufficiently high to hold these men. This cry of "back to the land" is not only found in England but practically in every European country. But this avowed hope was not realised and the technical equipment and organisation of agriculture was not such as to lead to further increases in the food production during the post-war period. After the Armistice, therefore, earnest efforts were made to mechanise English agriculture,—to improve its technique, to organise and develop agricultural research, to provide cheap agricultural credit through co-operative societies and to improve marketing facilities. But unfortunately on account of a deflationist policy in 1920-21 followed by the important countries, the wider extension of cultivation in Canada and other overseas countries, a severe slump in prices

occurred and it arrested for the time being the onward march of English agriculture. In spite of the Government policy of guaranteed minimum prices farm profits declined substantially and the area under cultivation declined appreciably. It was only about 300,000 acres greater in 1922 than in 1914. Despite war-time stimulus and state regulation the application of intensive methods, therefore, failed. The farmers clamoured for subsidy and protection against foreign competition whereas the consumers resented it. This conflict of interests between the country and the town retarded development. When the policy of decontrol came land went back to grass and agricultural policy was reversed.

In 1919, to evolve a permanent policy Government appointed a Royal Commission 'to inquire into the prospects of the agricultural industry in Great Britain' with special reference to prices, costs of production, wages and hours of work. It is noteworthy that the National Farmers' Union of England stated before the Commission that "farmers as businessmen could adapt themselves to a regime of low prices and would face the abolition of all controls and guarantees with perfect equanimity." In their

interim reports, the majority recommended that minimum prices should be guaranteed to growers of corn on the basis of annual average costs of production as otherwise no attempt to rehabilitate English agriculture could be successful in the face of severe foreign competition in respect of corn. The minority, for equally cogent reasons, recommended the abolition of all guarantees and restrictions so long as rules of good husbandry were followed by the farmer. They contended that guaranteed prices alone were insufficient even to prevent the shrinkage of the arable area, and besides the system would impose a heavy burden on the tax-payer and may prove unfair to the consumer. Before the Commission could present their final report, however, the Government pledged themselves to the policy of guaranteed minimum prices of corn and redeemed the pledge by passing the *Agriculture Act of 1920*.

As a result of it the extraordinary powers of control and intervention under the Corn Production Act of 1917 were withdrawn, except when an estate was being grossly mismanaged and even these reduced powers were to be exercised in consultation with the County

Agricultural Committees. The prices prevailing in 1919 for wheat and oats, being 68s. and 46s. respectively, were taken as basal prices for these cereals, and Commissioners were appointed to determine every year the average costs of production of these cereals. The difference between the current costs and these basal prices was to be made up by the State to the farmer at a flat rate of an estimated production of 4 qrs. per acre of wheat and 5 qrs. per acre of oats irrespective of the price the farmer could get for his sample. There was to be no attempt to interfere with imports or to determine or regulate prices nor with any exceptional occasional advantages that the home producer might by chance enjoy. The provision could be terminated by a four years' notice only.

The Act further improved the tenancy law of the country by providing for compensation for disturbance to tenants in all cases unless the tenant was abusing his holding or had failed to pay rent or had infringed any provisions of his tenancy contract. Rent could not be increased or reduced by arbitration except when it was demanded after 2 years from the beginning of the tenancy from the last revision of the rent.

Compensation for improvements made by the tenant was to be paid separately. Meanwhile wages had risen to 46/- per week under the direction of the Wages Boards established under the Act of 1917.

This policy could not, however, stop the decline of British farming while it materially added to State expenditure. In 1920 the area under wheat decreased by 3,46,000 acres, and that under oats by 2,92,000 acres. In 1921, the total shrinkage of cereals area was 2,85,000 acres again. Meanwhile prices were falling rapidly after having reached the peak in 1920. So long as minimum prices were guaranteed by the State, Government was bound to pay more and more to the farmers. So, in June 1921, a new Act was passed to repeal the Corn Product Act (1917) and the Agriculture Act (1920) except with regard to the payments for 1921. The only power retained by the Government was to require destruction of noxious weeds. A million pounds were set aside to finance the grant of more agricultural scholarships etc. and instead of statutory Wages Boards to fix wages, voluntary Conciliation Committees were instituted to fix agricultural wages. The policy of

control and intervention and guaranteed minimum prices was thus scrapped, and agricultural England relapsed into the old system of *laissez-faire* and individualism.

Agricultural Conditions and Policy After 1921 :—

One general effect of the Great War upon English Agriculture, apart from the expansion of Food Production under State control, was to speed up the rise in prices already going on since 1906. The years from 1915 to 1920 were the most prosperous years that English farmers of the present generation had known. From 1921 onwards, however, the prices began to fall until after 1929, the fall became catastrophic. The following table makes this quite clear.

Percentage increase of prices over the average of 1911-13.

1914	..	..	..	1
1919	..	..	..	158
1920	..	..	..	192
1922	..	..	..	69
1924	..	..	..	61
1926	..	..	..	51
1927	..	..	..	44
1930	..	..	..	34
1931	..	..	..	23
October 1932	..	..	..	0

The Fall continued until agricultural produce became cheaper than in pre-war years.

A very important change since 1914 had been the diffusion of the ownership of agricultural land. The transference of land that had been already going on in England became still more pronounced during this period of slump. In 1913 10.7% of land was in the hands of owner cultivators. In 1921, this proportion was 20%. Between 1919-21, the number of such owners went up by 45% and 3 million acres of land were sold. High taxes, local rates and wages were rendering it impossible for landowners, even big ones, to run their estates. They were being offered for sale in large numbers to war profiteers, peasant farmers, county councils and other public bodies and scores of country-houses became transformed into holiday resorts, schools and hospitals. Another notable feature was that very large holdings were becoming fewer by 1921, and medium-sized holdings of between 50 and 300 acres were increasing in number. These tendencies became still more accentuated in the period after 1921. Moreover, falling prices compelled the farmers to reduce their costs and output. Employment began

to shrink and the high hopes of 1911. were dashed.

In these dark days, there was much discussion of the right agricultural policy for the country. The National Farmers' Union demanded in 1921 relief from local rates, better credit facilities for farmers, security of tenure, and some measure of protection under the Safeguarding of Industries Act. The Labour Party demanded a living wage for agricultural labourers, better housing facilities, democratic agricultural councils and public experimental farms. The Liberal Party recommended nationalisation of all land not cultivated by owners without loss of their net rents or ownership rights. An Agricultural Tribunal of Investigation was set up to enquire about methods and organisation in other countries. Under the pressure of the world-wide depression, and in response to the need for safeguarding production, tenures and wages in agriculture, the British Government adopted a number of interesting measures. These sought to favour agriculture and agriculturists within the framework of the existing *laissez-faire* policy of the country by means of

state assistance, regulation and subsidies :—

(a) *Credits* :—The Agricultural Credits Act (1923) authorised Public Loans Commissioners to lend money to approved Land Mortgage Associations for long terms mortgages of land for agricultural purposes at rates of interest fixed by the Treasury and repayable in 60 years. The Agricultural Credits Act 1928 brought into existence the Agricultural Mortgage Corporation with a State Guarantee Fund of £7,50,000 for lending money for long terms. It pays fixed dividends of 5% and lends money repayable at the rate of £2/15% during the next 60 years. Short-term loans can be made under the Act by any bank to farmers on the security of their agricultural assets. The Act provided various legal facilities for these purposes both to farmers and banks. In 1934, the Corporation reduced its lending rate from 5% to 4½% and allowed repayments before they were due. Upto 1936 it had advanced £11.5 m. on 8,00,000 acres which with the buildings on them were valued at £18 m. and 93% of the dues were paid.

(b) *Wages* :—An Act of 1924 re-established Agricultural Wages Committees in each country under a Central Wages Board to fix minimum

wages adequate to efficiency and needs, all contracts to the contrary being declared void.

(c) *Tenures*:—The Law of Property Act (1923) abolished all tenures except the free-hold and lease-hold tenures in England. County Councils were empowered in 1926 to purchase or lease land to provide small holdings for sale by sixty instalments and also to create "cottage" holdings for agricultural labourers. Money may also be lent for constructing houses and farm buildings. Another Act empowered the Government to lend money for this purpose.

(d) *Rates*:—By an Act of 1923, agricultural land which was already subject to half the local rates was further relieved and subjected to $\frac{1}{4}$ of the rates, the deficiency to be made good from the Exchequer. Since 1929 the De-Rating Act by exempting agricultural land from local rates has eased the farmers' burden a little.

(e) *Marketing*:—The Merchandise Marks Act (1926) made it unlawful to sell imported goods without clear marks indicating their origin. Grading of home agricultural produce was authorised in 1928, and made obligatory for eggs. A stringent act against adulteration of foods and drugs was passed in 1928. The most

remarkable of the new laws was, however, the Agricultural Marketing Act of 1931 which enabled $\frac{2}{3}$ of the home producers of any agricultural commodity to prepare schemes for a more efficient marketing of their produce through marketing boards manned by themselves. Government was to institute a marketing fund, and producers were to contribute through a levy. Safeguards for consumers' interest were also provided.

These measures were significant of the new trend in agricultural thought all over the world and in normal times might have gone a long way to rehabilitate English agriculture and realise its objectives of stopping the change from tillage to pasture, checked rural depopulation and assured a home market to home producers. But the prices had not ceased falling, and in 1929, the economic depression which had been hovering over the world deepened into a crisis. The Wall Street crash was followed by crisis in Germany and Austria. England found herself in serious difficulties and abandoned the gold standard in September, 1931; the National Government came into power. In the last months of 1931 the world crisis reached its climax and

prices touched their lowest point and in finance and commerce there was the greatest dislocation. In these circumstances, with 91 p.c. of the House of Commons behind them, the new National Government adopted a vigorous policy of recovery.

National Agricultural Policy 1932-38.—The situation in 1931 was that while international trade had broken down, agricultural production all over the world had continued unabated, and in some directions even increased due to the work of scientists and practical farmers. The farmers of the world naturally sought in increased production a remedy for low prices. Britain as the only free market in the world was thus glutted with the surplus produce of the world; wheat and wool were selling below English costs of production, and English farmers were unable to sell some commodities at any price on account of the excess of supplies.

In the face of this unprecedented situation, the National Government gave up the old British policy of *laissez-faire*. The chief object was to help home producers and to encourage British trade with foreign countries. They regulated the price of the pound sterling by

establishing the Exchange Equalisation Fund. They adopted protection in 1932 to protect the home market and to be able to bargain with other countries to secure export markets for producers. To stimulate agricultural production at home, they granted subsidies to wheat in addition to beet-sugar which had obtained a subsidy for ten years in 1925. The most remarkable measure of all was the Marketing Act of 1933 whereby both home and foreign supplies were to be regulated to ensure adequate prices to home producers in the home market by planning both home production and wholesale distribution of food according to the needs of the community with due regard to consumers' interests. The whole policy was backed by Government finance and Prof. Venn has calculated that by 1935, deducting increased cost of wages and a cost of production 50 p. c. above that of 1911-13 the British farmers were receiving an annual direct and indirect subsidy from the State of £23½ millions over and above the recurring expenditure of relevant departments or a net gain of £1/8 per acre of cultivation. The new policy has succeeded in securing a rise of 20 to 30 p.c. in wholesale prices without

a rise of more than 1 to 2 p.c. in retail prices and there is reason to believe that much of this advantage has gone to the primary producer rather than to landlords or middlemen.

The New Policy in Action. Besides the aid given by the Agricultural Marketing Acts, another general Act supports home agriculture. It is the purpose of the Import Duties Act of 1932 to secure:—(a) restriction of imports, (b) safeguard against foreign discrimination and (c) increase of public revenue.

The Import Duties Act (1932) imposed duties on the import of such luxury products as flowers, hot-house fruits, early fruits and vegetables, and chiefly on two farm crops, oats and potatoes, the imports of which had declined substantially. Certain artificial manures and all farm implements and machinery of foreign manufacture are also taxed.

This was followed by the Wheat Act of 1932. Duties on 3/5 of foreign wheat which was normally imported to supplement home supplies would have imposed a severe burden on the consumer. Hence the scheme adopted was to supplement the deficiency between prevailing price and the cost of a minimum home produc-

tion of 27 million cwts. calculated on the basis of a price of 45/- a quarter. By the Agriculture Act of 1939 this limit has been raised to 36 m. cwt. This scheme has proved an unqualified success from the wheat growers' point of view, and the maximum quantity on which the subsidy is payable was reached within 2 years. As a result of this wheat acreage showed an increase of 46% between 1931-34 and in spite of a reduction of 1,731,000 acres by 1937, the increase was 44.2% above 1931.

The next step in the planning and nationalisation of home agriculture came with the Agricultural Marketing Act of 1933. The Act of 1931 had already provided for controlling the methods by which the sale of a particular agricultural commodity could be carried on if the majority of producers so wished it. The Act of 1933 provided for the control of imports also, for controlling home output and for developing production of secondary products connected with these products. It gave monopoly power to cartels of producers of specific agricultural commodities; and involved price-fixing or quantitative control or both. Both these acts are tied up with the new fiscal policy of which the

Ottawa Agreements of 1932 are a part and are one of the two ways (the other being subsidies) in which the Government helped English agriculture in the era of depression.

Under the provisions of these acts producers of hops, milk, bacon, and potatoes have now Marketing Boards to regulate the distribution of their products. The first state marketing scheme (and the only one under the Act of 1931) to come into operation was that for *hops*. Hops were marketed from 1914 to 1925 under Government control and after the latter year, on the failure of a voluntary society to control supplies, prices fell and acreage sank. Then came the Government scheme under which a board was set up to control marketing in July 1932. The scheme limited acreage according to a basic quota allotted to each registered producer. Hops grown in excess of the quota are not paid for until quota hops have been disposed of at the full price agreed with the brewers. The quota attaches to the land and not to the producer. Imports not exceeding 15% of the total consumption were allowed under licence. Control of hop sales is now absolute, and the prices ensure a profit of 20% to the growers. The scheme has

continued to work successfully. The Hops Reorganisation Commission of 1938 recommended the continuation of the quota provisions for 7 years and the renewal of the voluntary agreement between the Hops Marketing Board and the Brewers' Society under which price is settled by free negotiation between the parties concerned.

The most important marketing scheme, however, is that of *milk* and it came into operation after the report of the Reorganisation Commission on milk. It consolidated the method of collective bargaining already in practice after the war. The Milk Marketing Board has been in operation since October 1933 and is a party to the sale of more than a million pounds of milk daily in England and Wales. All producers are registered; they can sell their milk to any buyer at the fixed price but the buyer must pay the price to the Board which settles with the producer after meeting all charges and deducting the levy to equalise prices. If a producer cannot sell his milk, the Board must find a market for him or pay him for his milk. Prices are fixed on the principle of putting them as high as possible without reducing consumption.

so that there is a great range of wholesale prices accordingly as milk is used for liquid consumption or for manufacture of various products that come into competition with imports. Volume of production is controlled and "zoned", and all producers in the zone are given equal treatment, prices being equalised by means of the levy. The milk scheme, however, does not restrict production, it rather encourages it, but it controls four sets of prices from the retail to the farm: the retail price to the consumer, wholesale price paid by the Distributors to the Board, the pool price, and the farmer's price.

The scheme has introduced a great revolution in milk marketing methods with extraordinary smoothness, and without it, the industry might have collapsed. It has saved the milk farmer at a time of crisis, but the price has been paid by the consumer. According to Prof. C. R. Fay, G. Britain perhaps pays the highest price in the world for its milk (6d. a quart in summer and 7d. a quart in winter in 1937). Over and above price-fixing and equalisation, the Board has now well-advanced schemes to increase milk consumption without reducing producer's price and to encourage the production

of better milk. Milk is distributed to school children at half rates and many milk-bars have now come into existence to popularise milk drinking and to advertise it. Although the share of the co-operative movement in the marketing schemes has been very slight, 25% of the wholesale liquid sales of milk in England and Wales has been handled by the co-operatives.

The milk scheme, however, left the manufactured product unregulated and "promoted plenty at home while withholding it by price fixation from the high-priced user." There has been a steadily growing excess in the absence of a greater fluid consumption and hence 1/3 output goes to the manufacturing of butter, cheese etc. at competing import prices. To sustain the home prices duties have been imposed on non-Empire products and the home prices have been pegged by a subsidy costing £1½ million per annum to the Exchequer in addition to the grant of £½ million for school milk, publicity and research. The Milk Reorganisation Commission of 1936 proposed a further subsidy of £4.5 million to be used for the reduction of fluid milk by an amount which corresponds roughly with the present difference between the

liquid price and the pegged price of manufactured milk. To finance this planned control of production they suggested an import levy on imported dairy produce from all countries. The critics of the Commission's scheme suggested the withdrawal of retail minimum and the reorganisation of the Milk Board from a producers' body only into a permanent Milk Commission representing producers and the State. But the producers vehemently opposed this idea. Similarly the Government's Milk Bill framed on the 1937 White Paper on Milk policy and providing for control of the industry by an independent Milk Commission and drastic reorganisation of the system of distribution was strongly opposed by both producers and distributors and was withdrawn in December 1938. Meanwhile milk control continues under the temporary Act of 1937, the prices for 1938-39 being fixed on the basis of the previous year. A new bill with substantial changes was to be introduced recently but the present war stopped it.

The Pig scheme comprising bacon and pigs, came into force in November 1933 but broke down in its intended form in 1936. The industry had no record of collective bargaining to its

credit and the scheme created a legal monopoly for primary and secondary producers of a commodity which was hitherto imported from abroad. It was only a partial regulation of production. "The weak point in it was that it left fresh pork market unregulated."* The effect of it was that a plenty from abroad was hampered and home production was diverted to fresh pork which it did not control. The scheme consists of the Pigs Board and the Bacon Board (1933) and the Bacon Development Board (1935) representing producers, curers and the State. The main function of the Development Board is to license bacon factories and thus control the erection of new factories. It advises the Board of Trade on restriction of imports and sets a national quota to be divided by the Bacon Board among registered curers on the basis of existing productive capacity. Under the Act of 1933 registered curers should buy only from registered producers and in 1935 the restriction of domestic pig production was applied equally to farmers' and curers' pigs. But there has been no restriction of pig production as such except of the number and size of bacon factories.

*C. R. Fay.

These marketing boards do not control the whole national markets like the Milk Board, but since bacon comes almost wholly from foreign countries, imports can be regulated more easily. Bacon supplies can be estimated 12 months in advance and so regulation of foreign imports for the year is easy. Prices of pigs for curing are fixed on the basis of prices of feeding materials. Carcasses are graded in 5 grades at different prices. There is room for immense expansion in this industry as the home market can be completely controlled.

Hence, with import restrictions the scheme increased the production of bacon by 36.3% between 1934-35 but it failed to control the fresh pork market and could not compel the producers to contract to the Bacon Board. In 1936, therefore, it had to allow the curers to buy in the open market, and free pigs sold at a premium of 15s. over contracted pigs. Therefore "the Pig Scheme is control at its worst, as the Milk Scheme is control at its best."* However, the Bacon Industry Act of 1938 has consolidated and strengthened the existing scheme. The Development Board has been reconstituted and given

*C. R. Fay: Co-operation at Home and Abroad p. 276.

wide powers to direct policy while administration is done by the Pigs and Bacon Boards.

The *Potato Marketing Board* came into operation at the end of 1933. Sales must be between principals. Home production is controlled by fixing quotas for each producer, and by fixing the size of marketable potatoes. Thus, quantitative control of the marketed produce is secured by qualitative restriction through the use of a riddle. Potato growers suffered in the past mainly from competition among themselves. In September 1934 import of foreign potatoes had also been restricted. The Board has steadied the market by import regulations and the riddle. The crop in 1938 was heavy and the Board made renewed efforts to find a market for under-graded potatoes. Experiments in canning and manufacture have continued successfully and a publicity campaign has been organised to increase human consumption.

No other marketing boards have been set up, but action under the Marketing Acts has been taken in respect of fat-stock, fruit, eggs, poultry and beet-sugar. A subsidy of 5/- a cwt. was announced in the summer of 1934 on all fat-cattle marketed by home farmers in England between

September 1934 and June 1935. A Reorganisation Commission for eggs and poultry was set up in Oct. 1933. Under the Sugar Subsidy Act of 1924 the Government gave within 10 years 39½m. pounds and in 1934, while a committee was reviewing the situation, the subsidy was continued for another year. In 1938 the subsidy was about £2½m. In spite of the recommendations of the Sugar Committee of 1934 to the contrary, the Government passed the Sugar Industry (Reorganisation) Act in 1936 to continue the assistance without any time limit but the subsidy is confined to the equivalent of 560,000 tons of white sugar per annum. It has made the farmers' position fairly secure and has provided for nationalisation of manufacture by requiring all factories in operation then to be under the British Sugar Corporation Ltd. under supervision of a permanent Sugar Commission.

Egg control would meet with difficulty from consumers and producers and if its effects were to raise price of eggs production would be stimulated. The true line of advance on these cases is from the Grading and Marking Act of 1928. However, the Government proposals embodying the views of the Poultry Technical Committee

for the regulation of the poultry industry were announced in 1938. It proposed to establish a Commission to improve the breeding stock and regulate egg and poultry marketing by the standardisation of grades. A producers' marketing scheme was thought impracticable and the Government was prepared to provide a limited sum by way of loans for the establishment of co-operative egg-packing stations. Only on a serious dislocation of the market, import was to be regulated. A Poultry Bill on these lines was introduced recently.

Under the Live Stock Commission's scheme for a system of central slaughter houses, seven abattoirs have been set up by the Co-operative Wholesale Society to develop marketing of live-stock and cattle trade of the co-operative societies.

The new agricultural policy is thus designed to facilitate the organisation of distribution under schemes prepared by the farmers themselves through marketing boards consisting for the most part of farmers themselves. Methods differ in the case of each commodity so regulated. Supply regulation, in the case of those commodities overseas imports of which can be controlled, is successful but it must guard against two dangers. First,

the home product must be as good as the imported one; secondly, there must be no ground for the suspicion that supplies are being restricted to the consumers' disadvantage. The case for those commodities which have to face overseas competition which cannot be effectively controlled as from the Dominions, is rather gloomy. They can benefit by the increase of purchasing power among home consumers by restoration of industrial prosperity. Wheat and Beet-sugar enjoy special protection without any control of imports.

The new policy has, for better or for worse, fundamentally altered the old agricultural order in England marked by individualism in favour of a system of centralised organisation and control of production and marketing which has come to stay. The design is by combination of quantitative regulation and tariffs to bring about a sufficient stabilisation of fair price for the home producer. The peasant is too weak to adjust supply to demand on a declining market. The units of operation being infinite, the working of supply restrictions is difficult. Hence, the state control regulates the home or export market.

"Already no one not now a hop grower can plant hops for the market, nor may a successful

grower extend his acreage; no one may grow potatoes or may begin to grow them for the first time without the payment of a fine. No one may sell milk at prices less than those sanctioned by the Marketing Boards." It is hoped that by and by the system, except in the case of dairying and meat industries, should prove successful as initial difficulties are overcome. For meat and dairying, better days can come only with the restoration of economic equilibrium in the rest of the world.

In spite of these Government measures, however, there has been a further decrease of 96,000 acres in the arable area in 1937 which has been reduced to 9,024,000 acres. The diminution has taken place in all corn, root and vegetable crops. The area under grass increased by 22,000 acres. Thus, the total agricultural area was reduced by 74,000 acres, following a reduction of 80,000 acres in 1936. Excepting wheat and barley which showed increase, other crops (oats, beans, peas, mixed corns and rye, potatoes, sugar beet, and orchards) have shown a reduction in acreage. Under the Agricultural Act of 1937 a guaranteed standard price has been adopted for both barley and oats. Unlike India, the peculiarities of

English agricultural organisation make the share of co-operation in the marketing schemes very little.

The slow but steady advance of English agriculture has been arrested temporarily by the present war since September 3, 1939. State control of all food supplies and rationing, of prices, wages and profits, enhanced taxation, control of savings and investments, regulation of exchanges and diversion of credit from non-military purposes to finance the armaments have retarded for the time being the development of agriculture. Conscription has led to a shortage of labour on the farms which has been only partially alleviated by the employment of enemy prisoners. ✓ The production and prices of all foodstuffs and meat, poultry and eggs, milk and cheese, etc. are being controlled and rationed.

CHAPTER IX

THE INDUSTRIAL REVOLUTION

The second half of the 18th century and the first quarter of the 19th century witnessed a remarkable social and economic readjustment in England culminating in the celebrated Industrial Revolution. The radical changes wrought by the Industrial Revolution have been very lucidly summarised by Mr. G. D. H. Cole* as follows :—

“Coinciding in time both with Napoleonic wars and with a period of very rapid agrarian change, the Industrial Revolution exerted a catastrophic influence on the entire way of life and thought of the English nation. It increased immensely the urban population and began the process of emptying the countryside and the *older market towns of the agricultural districts*. It caused a huge shift of population from the south to the north of England, and a large immigration of Irishmen and Highlanders into the industrial districts. It destroyed the so-called domestic system and concentrated the

*British Trade and Industry : Past and Future p. 47.

workers in factories and urban workshops under the direct discipline of the employer. In so doing it gave birth to the working class movement as an organised force; and at the same time it raised up a new class of industrial employers intent on their demand for economic reform and political recognition, and acting now in alliance with and now against the class of artisans. It increased immensely the total wealth of the country, enriching the old classes of merchants and landowners as well as the industrialists. It brought with it a huge expansion of overseas trade, and gave Great Britain, for the best part of a century, an almost undisputed predominance as a manufacturing country. And it raised up for succeeding generations most intractable problems of bad sanitation, urban overcrowding, rural oppression and decay and persistent class-hostility."

Combination of English Technique and French Liberty:—The 19th century is the outcome of the French achievement of personal liberty combined with the new mechanical inventions which emanated from England. The result was the simultaneous removal of legal and physical disabilities. It witnessed the general application

of mechanical power to manufactures, transport; and mining and was thus a period of momentous economic changes. The new inventions altered all the old methods of production and distribution and affected *man* through *machinery* which enlarged his capacities and potentialities, and through the railways and steamships increased his mobility. A revolution in ideas followed these far-reaching changes in the physical world. A new conception of personal liberty emerged and the mass of the population of Europe became free as it had never been before. New classes and new problems arose and a new national policy ensued; the new methods of production and transport created new materials and food; new areas were opened up, new wants created and new markets developed; so that, by the end of the period, the whole globe was knit up in an economy of world interdependence and exchange, and world rivalry.

Great Britain was responsible for the successful development of steam power during the 18th century. The *steam engine* was revolutionary in effect because of its independence of climate or geography and further because of the variety of its uses. It can be used to drain mines, drive

machines, work flour mills, haul masses of goods from one place to another, bore tunnels, build houses, construct dams, empty ships, cross oceans, deserts or mountains. It can be applied in a country having sufficient fuel for it (coal and water) and it can economise labour by working night and day, in cold or heat. Invented by Newcomen in 1710 for pumping water from the coal mines and improved by Watt in 1776, it came into use in England from 1782 onwards. It was applied to work machines and create the blast for the new iron furnaces. After 1815, it gained fresh conquests by proving itself the effective motive power of rapid transport. It became the great instrument of man's control over nature.

France was responsible for the propagation of the ideas of liberty, equality and fraternity which when applied to the economic sphere meant the abolition of the rights of one man over another, the equalisation of taxation, the right to move from one place to another, the abolition of internal hindrances to the movements of people and goods, free choice of occupations and equality before the law. The Frenchman in general became independent and possessed

of the rights of equal citizenship. Wherever the French armies went they spread this new gospel of economic liberty of the individual and the abolition of the restrictions and privileges. The combination of steam and the liberty of movement was momentous in its results. When economic freedom had been achieved the masses of Europe became free to move and to grow rich or to starve. Then came the railways and the steamship, making possible a degree of mobility hitherto undreamt of. Legal and physical disabilities were thus removed almost simultaneously at the very time when men found themselves free to choose their livelihood. New instruments of production such as machines lay to their hands, and new occupations opened out on every side. The result was *new people, new classes, new policies, new problems, and new empires*.

Thus, *the 19th century is the outcome of French ideas and English technique*—an age of mechanism and personal mobility. The *chief characteristics* of the economic development of the 19th century are as follows :—

- (1) *Personal liberty*: The abolition of restrictions on personal freedom comprised in the sweeping away of serfdom and all

the mediæval and feudal limitations on free movement resulted in a new agriculture working with free labour and carrying out individual instead of communal agriculture, and intensive instead of extensive cultivation.

- (2) *The coming of machinery created a new industrial class and a new labour movement.*

The mechanical transport and machinery caused the concentration of people on the coal and iron areas, created new towns, a new industrial class and gave rise to the trade union movement.

- (3) *Mechanical transport* caused a revolution in the relative importance of countries in commerce and social life. The application of steam to land and sea transport and the consequent coming of the railway and the steamship made countries hitherto hampered by distance from a coast or by climate, suddenly great economic possibilities. New articles became available and a commercial revolution followed the Industrial Revolution. Huge business concerns with world-wide interest emerged and equally

large trade unions became possible. All countries were knit together into a closer economic relationships. A social revolution followed. People massed in towns or migrated to the new world in millions and opened up new countries as markets and sources of raw materials and food-stuffs and the whole world became interconnected as it had never been before.

- (4) The development of *new National economic policies* led to an increasing state control of commerce and industry. The industrial and commercial revolutions had created new classes—a new trading class, an industrial class and a moneyed power class and the old landed aristocracy declined in importance. The new democracy consisting of these classes secured the extension of the franchise and swept away mercantilism. They established *Laissez Faire* and Free Trade. An era of liberalism and cosmopolitanism was followed by a reaction after 1870 when there was a return to protection and state regulation on every side.

- (5) A new effort at race expansion began which inaugurated a *new colonial era* making for world interdependence and world rivalry. The whole world became economically linked up in spite of the striving after self-sufficiency which was the characteristic of the new leaning towards protectionism after 1870. There was the rise of a new British Empire, a new Russian Empire in Asia, a new France in Africa and a new Germany in Europe, Africa and Polynesia.

The changes in industry that occurred in England in the second half of the 18th and the first quarter of the 19th century were so fundamental and of such far-reaching character that they have been designated as the "Industrial Revolution". In an etymological sense, this is a misnomer, but the social and political changes wrought by the series of inventions in this period were so remarkable that they transformed the entire social and economic structure and the results were surely revolutionary. The industrial revolution was indeed a transformation that entirely changed processes and conditions of manufacture as a result of many inventions and in-

creased use of machinery adapted to large-scale production and propelled by steam power. Its most notable manifestations were the rise of the factory system; the growth of the urban population and an unprecedented increase of manufactured articles. It is impossible exactly to delimit the period when these changes began, but in England it may be said to have begun in the middle of the 18th century and to have been largely completed by 1825.

The Causes of the Revolution :—The explanation of why the Industrial Revolution occurred in England than elsewhere are many and rather elusive. However, a few favourable circumstances stand out prominently. Firstly, there was a relative abundance of loanable capital in England obtained from the rich trade of the Orient and the West Indics which was mobilised by the Bank of England. The Reformation is believed to have helped the rise of capitalism. Moreover, the English economic system was less restrictive. It is true that in the second half of eighteenth century this growth and accumulation of wealth was retarded by wars, yet the loss was not so great as that suffered by France. Long before 1800, surplus wealth was being utilised in the building up

of large estates, the production of new crops, and the development of the capitalistic type of agriculture; and in the same year mobile funds were generally available for the establishment of large-scale manufactures. Secondly, there was an abundance of labour both skilled and unskilled. In the 17th century and 18th, England attracted many of the best artisans of Europe notably the Huguenots which immensely improved the energy and the intelligence of the working classes, although the gain was the largest in silk, linen, paper and pottery industries. There was hardly any industry in which England did not profit heavily by the knowledge and skill of her immigrant workers. Thirdly, there was an extension of markets, specially after 1760, involving and evergrowing demand for English goods which was provided by the colonial Empire. Fourthly, Britain enjoyed political security on account of which people did not hesitate in venturing into new fields. Fifthly, the insularity of the position of England led to the growth of her shipping which was a most efficient agent for the distribution of commodities and for carrying trade. This advantage was increased by the centrality of her position in the land hemisphere which gave her an unrival-

led opportunity for dealing with any markets. *Sixthly*, England was singularly free from internal tariff barriers. *Seventhly*, Englishmen had acquired experience of large-scale production and trade with distant markets which was of great help when the new industrial and commercial systems came into being. *Eighthly*, the manufactures of England, unlike those of France, were staple commodities in which the economies of large-scale production could be easily realised. *Lastly*, the rivals of England were busy with their own affairs while England was free to look after its colonial Empire. The population of England was but small while her trade was fairly large. In fact, England had 9 millions people only to deal with a foreign trade of £32 millions; while France had a population of 26 millions to deal with a trade of £40 millions. The volume of trade was moreover continuously increasing which made the inventions of labour-saving devices a matter of absolute necessity, and hence the Industrial Revolution.

Features of the Industrial Revolution:—Both the industrial and the commercial revolutions hinged on coal and iron and the power to transport them. Steam was known to the English

people even in the early part of the 18th century. Its successful working required coal and therefore a great demand for coal ensued. As soon as coal was available for use, enormous tracts of land could be available for cultivation because formerly charcoal was employed for smelting iron and for fuelling purposes for which forests were necessary. Therefore, the agricultural revolution was also bound up with these changes. Coal was also required for driving power, for smelting iron, and as a basis of chemical industry. Steam in its turn created a new demand for iron. Wood was no longer strong enough to stand the strain of the new driving force and machines had to be made of iron; hence an increased demand for iron. Thus, the two chief features of the Industrial Revolution were increased demand for coal and iron.

Examining the above facts a little more analytically, we can say that the Industrial Revolution comprised the following six great changes or developments which were inter-dependent.

(a) It involved the development of an engineering industry. Engineers were required to make and repair the steam

engines, to make machines for the textile factories, and for other purposes. But engineering depended on the iron founders.

- (b) Unless the iron was smelted in quantities and of quality sufficiently good, the engineers could not get materials on which to work, so that the revolution in iron making was the second development which almost necessarily preceded machinery.
- (c) The third change came when machines driven by water or steam power were applied to textiles manufactures. They began in the simple operation of spinning, led on to the invention of weaving machines and the inventions in the cotton industry spread to wool and to linen and then to silk.
- (d) The fourth development became necessary. The bleaching, dyeing, finishing process and printing had all to be transformed to keep pace with the output of the piece-goods and this meant the creation of great chemical industries.

- (e) Engineering, iron-founding, textiles machinery, and industrial chemistry, all hinged ultimately on the development of coal mining. The great development of coal mining is the fifth great change comprised in the Industrial Revolution.
- (f) Finally the mass production by machinery in factories could not have attained its present overwhelming importance, had there not been a corresponding development in the means of transport which facilitated the movement of food to feed the new industrial population centred on the coal and iron areas, which enabled the transference of the vast quantity of raw materials to feed the factories and which helped in distributing the vast bulk of manufactured articles.

Two Phases of the Industrial Revolution:—

With reference to the means of transport the Industrial Revolution can be divided into two distinct periods: (1) from 1770-1884. (2) 1884-1914.

The first period is the age of metalled roads and canals in which the most important industries were cotton and wool, metallurgical industries.

and the engineering trades. Mining was gradually coming to the forefront but chemical industries were in their infancy. The unit of business consisted of the individual businesses, and the partnership firms; and the organisation of capital was not in joint stock basis. Trade unions were still to come but friendly societies and local unions had been started. Labourers were not allowed to organise themselves till 1825 and therefore there were several outbreaks of labour unrest.

In the second period there was a widespread application of machinery to trades other than textiles. New industries like the steamships, railways; steel, and electrical appliance making had become common. The unit of business consisted of the joint stock company with its limited liability and transference of shares, and joint stock banks had also grown in a very large number. Industrial chemistry was developed to the highest pitch; competition had become so acute and hard that it gave rise to a movement for amalgamations and therefore a number of trusts, pools, mergers and combines grew up, not only in protectionist countries like the U.S.A., Germany and France, but also in the free

trading England. Amalgamations, both horizontal and vertical, had become not only national but also international.

The Textile Industries:—When the revolution began, woollen manufacture was the most important industry of England. Daniel Defoe wrote about it as follows: "It is in a way in every county, in every market, in every trading place and it is received, valued and made use of, and called and wanted everywhere. In a word, all the world desires it and all the world almost envies us the glory and advantage of it."

This widespread trade naturally necessitated an elaborate organisation. Merchants bought wool and distributed it all over the country to be spun. After wool came silk which was the next most important textile industry in the early 19th century. Then came linen and fancy cotton manufacture which was unpopular with those in authority because the supply of raw cotton was so uncertain. But with the advance of the Industrial Revolution the tables were turned and the woollen manufacture was ousted from its place of pride by a new exotic trade like cotton.

There were several *reasons for the introduction of the new inventions first in the Cotton Industry*:

In the *first* place, foreign articles of commerce were either prohibited or heavily taxed. For example, in 1766 a levy upto £200 was charged at the Guild Hall from members having in their possession a handkerchief of French cambric! In 1700 the Government prohibited the import of cotton prints from India, China, and Persia except for re-export. In the *second* place, the use of cotton by English women had become so common that something had to be done to relieve this pressing want. So the cotton industry began to turn out a material which was not cotton but half linen and half cotton. For this purpose the climate of Manchester as well as its proximity to Ireland were specially suitable. In the *third* place, its raw material (cotton) could be easily imported from Asia in as large quantities as might be deemed desirable, which fact made it specially suitable for large-scale production, the supply of wool being but limited. In the *fourth* place, Great Britain had by this time such large trade connections with her colonial empire and outside that she could expect to sell any quantity of cotton goods that were made,

and this was a further inducement to manufacture on a large scale. The result of all this was that machinery was first employed in the cotton manufacture, and thence its use spread to wool, silk and linen. Above all, the cotton industry was a new industry in which the vested interests were not so strong as in the old established woollen industry, and in which there was relatively a greater shortage of labour, and hence, a greater need for labour-saving devices or machines than in wool.

Inventions in the Textiles:—In the textile industry, spinning and weaving were the two primary processes. There were three changes from handicraft to machine industry:—1. Hand machines used in homes. 2. Hand machines massed in one building for better supervision. 3. The application of motive power to these machines.

Hargreaves invented the Spinning Jenny in 1764 for wefts and this was patented alongside of another invention of Arkwright—the water-frame for warps in 1769. Both of these were gradually superseded by Crompton's Mule in 1779. In spinning of long staple wool and short staple wool the *Jenny* and the *Mule* were adopted

later; but hand spinning had disappeared in the woollen as well as in the cotton industry by 1820. These inventions stimulated a rapid development of carding and combing machines. Paul's carding cylinder in 1748 was followed by several combing machines for wool invented in 1792-93. In cotton weaving, there was a great scarcity of weavers owing to the abundance of yarn. This stimulated the invention of machines for weaving. Kay's Fly shuttle, a hand machine, was gradually superseded by the inventions of Cartwright, Johnson and Horrocks who produced a practicable power-loom by 1815. Handloom weaving still continued and formed an important part of the cotton industry as late as 1840. Weaving of worsted by power loom dates from 1820-30; but woollen weaving did not become a factory industry till 1850-60. The spinning of linen by machinery had been regularly carried on by Marshall of Leeds as early as 1788, but only coarse yarns were produced. The first really successful machine was due to Gerard, a Frenchman, who spun the flax wet. A patent was taken out in 1814 for his machine and its defects were corrected by Kay in 1826 so that machinery began to be used, widely in this

industry also. The reason why machinery was introduced late in linen was due to cheap labour and the heavy initial capital outlay on the machine. Lace and hosiery also became factory industries between 1840 and '69.

The development of the textile industry stimulated discoveries in industrial chemistry. Bleaching often took 8 months. Roebuck evolved oil of vitriol and set up works at Manchester in 1746. The Frenchman, Berthollet, took the matter further and developed chlorine. The process was made a commercial possibility by Tenant in 1799 but the most important thing, printing, still remained unaffected. This was also successfully solved by 1785, when printing by cylinder in place of hand blocks came into use. From these inventions; however, we should not conclude that the Industrial Revolution in England came by a sudden jump. The change was inevitably very slow and consisted of various stages.

Causes for the slow growth of Factory System in England :—In spite of the inventions described above the factory system grew very slowly in England. There were various reasons for this :—

Firstly people were reluctant to give up their family occupations. Work in the families made industries a source of bye-income. Family conditions were more stable and there was not much independence for the members of a family. The result was scarcity of labour on account of which the factory system came late. *Secondly*, the employers themselves were reluctant to embark on the factory system. Home workers underbid each other and thus the employers got labour very cheap. They were further required to take no other great risks than on warehouse and looms; and they wielded great power over the weavers and held the whip hand. Machinery, on the other hand, was costly and did not ensure any certain income as the domestic system did. *Thirdly*, the scarcity of labour also disappeared by and by and the population had increased. Epidemics of plague were now unknown and though typhoid and small-pox still took enormous tolls, yet their effect was not very appreciable. The food supply improved on account of the agricultural revolution. The number of houses also had multiplied with the result that along with the privacy thus secured the number of marriages increased and the

population multiplied. On account of these factors, the factory system marched rather very slowly in England and it took about 70 years to develop the principal processes of Cotton, Woollen, and worsted trades.

In iron, engineering, and coal trade the development was even more gradual. Iron was first of all smelted with charcoal. In the 18th century, however, there was a timber famine, on account of which the output was greatly reduced. In fact "the condition of the industry was so parlous that nobody could prophesy at that time that Great Britain would prove the forge of the world". After 1750, however, the iron works left the proximity of woods and grew up on the coalfields to obtain fuel. Means of communication also improved with the result that whereas in 1740 only 17,350 tons of iron were manufactured, in 1900 the total output had mounted up to 9 million tons. The development of coal mining was also gradual on account of pumping difficulty which was solved by Newcomen in 1712. Then there was the difficulty of distribution from the pits because of bad conditions of the canals, defective roads and lack of railways. After the construction of

railways, the progress became very rapid so that whereas, in 1700, only 2,148,000 tons of coal were mined, in 1913 the quantity nearly increased by 143 times to 2,87,411,869 tons. The development of the steam engine is another instance of the slow march of the factory system. It was first of all costly and defective; it required skilled labour which was not available then and therefore, the manufacture of engines and engineering made a very slow progress and Great Britain had to train a race of engineers before she could carry out a radical transformation of her industrial system. Thus, in every field the march of the revolution was slow. This was, however, retarded, *lastly*, not only by the deficiency of machines and their unsatisfactory nature, but also by the dislike of labourers to work in the factories with machines, the possibility of riots and of machine-breaking by those who thought they were injured by their adoption.

Economic and Social effects of the Revolution:— The Industrial Revolution thus created fundamental changes in the social and economic structure of England. In the *first* place, it gave rise to new industries. ~~Secondly, it transformed commerce in every aspect.~~ *Thirdly*, new

districts came into prominence, *e.g.*, before 1760, the ~~South-East~~ of England had been the richest and most populous part of the country but after the Revolution the North-Western part became more prominent. In the *fourth* place, new towns grew up in the industrial regions with complicated sanitary and health problems. Typhus and small-pox were chronic; fevers of all kinds were one of the greatest causes of pauperism and cholera was a frequent visitant. The *fifth* great change was the break-up of domestic industries and their replacement by factories. In the *sixth* place, it gave rise to a new class of labourers, mere attendants on machines, propertyless, moneyless, and homeless. The factory system of production with its regimentation of a large number of people under conditions of routine and discipline and elaborate differentiation, increased the monopoly of life for the labourers and in consequence brought about another great change—the new relationship between the ~~employer and employees~~. Thus, the sixth great change was the antagonism between capital and labour. True it is that the capitalist had always existed in England. Under the domestic system of economy his position

was much more secure, because the labourers were scattered and could not unite to take concerted action against the employers, and moreover, they had no strong feeling of resentment against the employer because labour-saving machines had not come into use at that time. With the factory system, however, the position of the worker changed. He became more dependent on the employer and resented his master driving his pair of four which to him appeared to have been unlawfully obtained out of his labour. For his social life he was driven back on his fellow operatives. Massed together in the new industrial towns, the labourers could exchange ideas, discuss their grievances and thus became class-conscious. All through the 18th century in spite of restrictions, trade unions had been increasing in number with the object of securing a standard wage or limitation of hours of work. With the coming of the railways they became national societies and later on they also became international. The *seventh* great change was the growth of a new middle class which increased in numbers and wealth. A new race of "contractors, of coal merchants, of bankers, shop-keepers and insurance magnates"

grew up. The *eighth* great change was the large-scale production and consequent productive efficiency based on the principles of specialisation. Mass production of goods also cheapened them and thus contributed to the improvement of the general standard of living.

The above economic changes had far-reaching social effects both good and evil. So far as the worker was concerned, his position in a well-ventilated factory after the transitional period was decidedly better than when he worked in a house littered with the family possessions. Wages were also higher in the factory; and work was more regular than in domestic manufactures. Moreover the workers working under the same roof could now combine and enforce decent conditions of work, a standard wage, shorter hours, payment in full, in coins and not in truck which was the common feature under the domestic system. Arbitrary reduction of wages was no longer possible, another beneficial effect of the factory system was the general development of intelligence among the artisans collected in the factories. Endless new opportunities for work were opened up on account of which the conditions of labour

improved materially. Under the domestic system the child was set to work as soon as he could crawl and his parents were the hardest taskmasters. Under the factory system, however, a number of acts were passed by and by to regulate the employment of children and of women with a view to improve the conditions under which they worked.

The evil effects of the Industrial Revolution:—
The workers lost their independence. The tyranny of the factory bell and the work under strict supervision and rigid discipline were so unwelcome that there was a reluctance to work in factories. In the period of transition, the condition of children was horrible when pauper apprentices were employed under the old apprentice system which did not cease till 1832. The condition of married women was most unfavourably affected; family income declined and the poor law had to step in, specially in the south of England. The rise of the middle class also produced similar effects. Family and business quarters got separated and thus the business training of the married women was no longer possible and widowhood meant complete ruin. The married women therefore on the

whole were very adversely affected by the Industrial Revolution. Besides, the work was monotonous, industrial incidents became common, and England became dependent upon foreign countries for food supply. Conditions in the factories were at that time insanitary and hours of work long. Constant lockouts and strikes became the order of the day. But the worst evil of all was the growth of pauperism. This was the combined outcome of the Industrial Revolution and Napoleonic Wars. Poor laws were wrongly administered and when the great depression came retrenchment and economy made matters still worse. A million soldiers were discharged after the Napoleonic Wars, which added to the number of paupers. Thus, pauperism and the consequent emigration of a large number of people from the country was directly traceable to the revolution and its aftermath.

In spite of these evils, however, the Industrial Revolution came as a great boon to England. Napoleon had aimed at destroying British Overseas Trade and Industries, his chief ambition being the destruction of the sources of British economic power and the setting up of France in

her place as the pre-eminent industrial and commercial country. But Napoleonic Wars recoiled adversely on their originator, ruined the industries of France and its foreign trade by collapse of credit. On account of the revolution, however, Great Britain successfully met the shock and came out victorious and probably stronger than before. Machine production increased Great Britain's wealth and power and made her the forge of the world. It enabled her to hold her own against Napoleon, and in saving herself she saved Europe. The revolution helped her to bear the great burden of the war debt, and lightened the effect of the crushing taxation. It provided more work, steadier employment and better wages. In brief, the economic prosperity of Great Britain after the Napoleonic Wars was due mainly to her new Factory System.

CHAPTER X

COMMERCIAL REVOLUTION IN ENGLAND

We have seen in the last chapter how the introduction of machinery brought about an Industrial Revolution in England and how the very nature of industries was changed. With the introduction of mechanical means of transport, commerce was affected in the same revolutionary way. The coming of railways and steamships meant the substitution of world economy for national economy, the general results of which were world interdependence and world rivalry. Mechanical transport created a revolution in the commercial and industrial importance of states. It created a new mobility of goods and persons and its construction and control brought a change in national policies.

Revolution in the importance of continental areas :—
The first result of this mechanical transport was the revolution in political and commercial importance of continental areas like Canada, the U.S.A., Russia, India and Africa. Railway by penetrating into the interiors enabled people to go inland and move away from rivers. In

North and South Americas they opened up central regions and enabled the settlers who followed railways to grow wheat, maize and cattle for export. From the coast this bulky agricultural produce was transported by steamers at cheap rates to Europe. With the penetration of inland areas as well as with the making of cheap steel, railways became cheaper still. In the same way the possibility of penetrating the interiors in Africa brought the continent prominently before the world. The railways enabled the falls and rapids to be avoided, exploration of the interior took place and Africa became one of the economic areas with a great future. In a similar fashion, Asia was opened up by the new transport. The Siberian and the Indian railways brought the commodities of the interior of Asia within the reach of the Europeans and thus removed their mutual isolation. In brief, the characteristic feature of the 19th century was the development of continents instead of coast lines. So far as the three continents of Asia, Africa and America were concerned, the British empire was no longer an empire of outposts. There was 'continental inland expansion.'

While these three continents were being thus affected, Europe itself could not avoid the influence of new means of communication. Perhaps the most characteristic feature was the economic development of Germany after 1870 due largely to the creation of the European railway systems. Germany became a Mediterranean power on account of the railway over the St. Gothard and obtained a great economic influence in Italy and Balkans. With the railways her iron and coal were brought together and Germany became a great industrial state. Russia hindered by frozen ports and rivers in winter and absence of roads was able, when railways were developed, to communicate in all seasons with all parts of Europe and Asia. The U.S.A. was another of the new powers that owed her development to mechanical transport. The interior of the country was opened up by railways and she began to export her grain and meat to Europe. The railways developed her iron and steel works as well. It is interesting to note that in the U.S.A. many railways were built up by sheer speculators. They competed violently with the result that all of them underwent losses and brought about an amalgamation in the 'nineties.

Mechanical and rapid transport may be said to have assisted in creating another great area—the British Empire of the 19th century. So far as Great Britain is concerned railways were developed there in trunk lines in the 'forties, at least a decade before they came as a coherent system elsewhere. Thus, Great Britain was a pioneer in railway construction and also the first to experience the results of speedy transport. She had to bear the losses of the experimental stage in railway construction as she had done in the growth of the factory system and the rise of new and unhealthy towns. Railways, however, confirmed her in the position of the workshop of the world. They created new rivals for her in Germany and the U.S.A. which compelled her to take up a new industry—iron and steel ship-building—an industry for which it was well suited. With the iron ship the supply of timber was no longer valuable and a revolution in ship-building technique was brought about. In the 19th century no country approached Great Britain either as a carrier or as a ship-builder. Inventions followed inventions. Devices to economise the consumption of coal and to increase the durability of ships were found out

with the result that Great Britain became the greatest naval power of the world, and well it was for her. Steamer communication made the British Empire possible and proved as much a link for her as the railways did for Germany, Russia and U.S.A.

In creating the new British Empire the railway also played its part. The British Empire of the 18th century consisted mainly of 'out-posts and trading centres'; the empire of the 19th century, on the other hand, witnessed the growth of the British Empire inside the continents. New commodities were produced in these areas which again made for the interdependence of the whole. The wheat exports of Canada out-rivalled those of the U.S.A. The wool of Australia, the jute of India, the rubber of Africa and Malaya Peninsula, the oils of the Gold Coast and the nickel of Canada became the monopolies of the British Empire as also the bulk of the gold production of the world. The cotton of Egypt supplemented with its fine staple the cotton of the U.S.A. and India proved to be the best customer of British goods. New commodities, new cultures and new problems were the outcome of the railways which enhanced the political and economic

importance of tropical territories. The result was a race for colonies and a new desire to dominate these areas which could provide an ever-increasing quantity of raw materials and serve as markets for manufactured goods. There was a new stimulus to acquire colonies and spheres of influence. It very definitely led to a return to the protectionist tariff to defend the home market against the ease with which goods could be sent from one country to another. Even labourers of different countries specially Australia and the U.S.A. supported the protectionist regime. Even a free trading country like the United Kingdom began to defend its people against unfair competition by passing, for example, the Patent Act of 1907 which made any patent taken by foreigners in England invalid unless the articles were made there within 4 years. This intensified national rivalry, led to cut-throat competition and, therefore, a movement for amalgamation and combination to avoid unnecessary losses among manufacturers, producers, merchants and transport agencies set in. World-wide swift communication enabled both labour and capital to organise themselves not only on a national but on an international scale.

Thus, we see that with the help of mechanical transport continental areas like the U.S.A., Africa, Asia and Canada were opened, that a new rivalry with Germany and Russia came into existence, that the British Empire became linked up as well as self-dependent, that a new race for colonies was run, and that on account of national rivalries nationalism was gradually replaced by internationalism. In fact mechanical transport has revolutionised continental areas.

Revolution in Commercial Staples and Organization:—Naturally with all this production at an intensified rate all over the world a revolution took place in the staples of commerce. In the 15th century the spice trade was a source of wealth; in the 16th and 17th centuries "slaves and spices were the plums of commerce" to which tea, coffee, sugar and tobacco were added later on. In the 19th century, however, as a result of the mechanical transport, bulky articles like coal and iron, tropical products, foodstuffs and raw materials were the rich lincs of trade. Prices of these commodities fell, therefore real wages of labour considerably rose. Besides, coal and iron and machinery assumed a new importance on account of their portability. The

railways and steamships themselves created an almost insatiable demand for iron and steel not only for construction but also for renewals. The English railways alone in 1913 were calculated to consume as much as 30 million pounds worth of material. The result of this was that with the development of mechanical transport, coal, iron and steel and machinery assumed an importance which they had never done before. Along with this demand went the development of mines and engineering. An interminable supply of foodstuffs brought about an insurance against famine and specialisation of work as well as of agricultural produce. Mechanical transport equalised prices and inter-knitted the various parts of the world enabling them to produce the articles for which they were best fitted rather than aim at a hollow self-sufficiency.

Mechanical and rapid transport not merely altered the relative value of areas and commodities but it also promoted a *revolution in business organisation*. As traders *could now get goods safely and with absolute certainty* they no longer kept large stocks. Local markets and fairs lost their importance. *Articles could now be purchased from shopkeepers near at hand*, and shopkeepers were quite

sure to get their goods regularly on account of mechanical transport. *Journies became comparatively safer. Railways did away with the fear of robbers and steamships with the fear of pirates.* In the 16th century as well as the 17th century a ship was 'Fair Game' for any one strong enough to take her, and piracy was the curse of commerce. Although the 18th century ships had to go stocked for trade and armed for fight, if need be. This necessity of the armed ship now disappeared. Besides these changes, efforts were made to eliminate competition by *combinations*, which were quite easy on account of rapid transport. *These combinations were vertical as well as horizontal.* In the former combination the whole industry from the raw material to the finished article was controlled by one organization. It became common in the metallurgical trades, where the coal mine, supplies of iron ores, blast furnaces, rolling and steel mills, steel wire, and other works were frequently under the same management. In the latter combination, namely horizontal, firms doing the same business at times combined generally to fix prices or to push sales abroad. They did not necessarily control either the raw material or finished goods. They simply united all the busi-

nesses at their own stage of manufacture. Such a combination is to be seen in Coats, sewing cotton, the capital of which in 1899, was ten million pounds. Such combinations both vertical and horizontal led to the creation of huge businesses which in their turn greatly stimulated the spread of machinery. Besides these combinations, there were *combinations for the purchase of raw material* and also *international combinations*, firstly by means of international treaties of commerce, and afterwards by bringing the same trade in different countries under the same management. On the whole, these combinations made for efficiency of production and the elimination of waste. The old ideal of free competition between the individuals has ceased and the problem of 20th century Government is to devise a scheme which shall allow the advantageous side of these combinations to have full scope and yet prevent the harmful effect of monopolies.

Besides these combinations, some other types of combinations have also come into existence.

Multiple Shops have sprung up, which, though not monopolies, show the tendencies to co-ordination and large-scale organisation. They deal in all kinds of wares and aim at being

universal providers. To control supplies, they have their own tea plantations, their own orange groves, their own fruit farms and their own food preserving factories.

Allied industries also have been brought under the same management. A British explosives combine also makes motor cars, bicycles, artificial leather, and rubber tyres. Such have been the changes brought by the commercial revolution in the importance of commercial staples and in the organisation of business.

The Creation of the New Financial Era:— Mechanical transport has caused new developments of finance. It has now out-run national boundaries and national regulations and has acquired an international character. In the first place, Railways tended to increase the national debts of the states, and reacted upon their revenue and expenditure by making further taxation necessary in some cases, or by yielding such profits in others that they proved to be a source of revenue in themselves. In the second place, they opened a new and vast field in railway building, either by investing in railways where they (Railways) guaranteed the interest, or by building them in the continental lands.

outside Europe, namely India, Canada, etc. In the third place, Railways have created a new problem of taxation of capital invested in several countries. Many businesses are not carried on in one country alone but are international and taxation is levied in each country on the undertaking. There has thus arisen the necessity of double, triple and quadruple taxation. The problem of adjusting international investments to national finance is one of the greatest difficulty and can only be solved by international agreements as to the proportion of taxation which shall be taken by each country. In the fourth place, Railways have led to the extension and specialisation of the mechanism of credit. Banking, exchange business, discount and accepting houses, produce exchanges, and speculative markets and stock exchanges have all expanded and altered in character. The development of credit, in all its various aspects and forms, has become very elaborate to enable intricate world operations in finance to be carried out smoothly. Thus international business combines, international finance and taxation and international exchanges have been the inevitable outcome of new forms of transport and national economics

have been greatly modified and readjusted to suit these new conditions.

Social Effects of the Commercial Revolution:—

The Commercial Revolution brought about by transport has resulted in far-reaching social changes. Railways introduced a new personal mobility, and this has produced a social revolution no less remarkable than the industrial, commercial and financial. *New towns have come into existence* and people have been gathered there not merely by the increased opportunities for employment but also by the attraction of town life and the excitement of living in the mass. Women ousted from work on land by agricultural machinery went into domestic service and left the village. Having become once accustomed to town life, they did not care to marry and settle in the country. They felt lonely. Town life had a great attraction for women of the poorer classes, who did not have the chance of going out to work, and coming home again like men. Hence they used their influence to keep their husbands in the town.

Railways further created an entirely new class of workers and greatly extended the employment for others. Plate layers, drivers, firemen, cleaners,

guards, shunters, station masters, etc. were all new, while greatly extended opportunities of employment opened out for people who transported goods to and from railways and who unloaded ships at the docks. There was a rapid increase also in the trading and shop-keeping class, in consequence of the commercial revolution wrought by the railways.

The local artisan class, however, has been adversely affected. The growth of giant stores which could despatch goods by post or rail, tended to concentrate business still further in large urban areas to the detriment of local industries.

The migration of people led to national policies for and against immigration and emigration. At first emigration was permitted from Great Britain on account of the distress wrought by the Industrial and Commercial Revolutions, and many persons went out to the colonies. The sheer over-population in Ireland was the cause of emigration from that country. In 1847, a large German middle class emigration took place on account of scarcity there. With the growth of industries in Germany, emigration from that country came to an end, and its place

was taken up by Russians, Austrians and Italians. Later on, however, it was found out that it was not to the best interest of a nation that people in the prime of life should leave in excessive numbers and consequently the continental governments restricted the outflow of emigrants by prohibiting advertisement and curbing the activities of steamship companies.

Emigration began to take place from India and China also. This led to the formation of immigration laws. The people in the colonies were afraid of oriental immigration for the standard of living of the eastern peoples was very much lower than that of the western, and their presence in the colonies was likely to reduce wages. This problem is fraught with difficulties, and likely to involve the whole world, and specially the British Empire in a great colour war. Indians claim the citizenship of the British Empire, and the Chinese point out that the British people have compelled them to adopt the policy of 'Open Door' and that it will be a great injustice to China if they do not adopt the same policy in the British Empire.

Thus, the Commercial Revolution brought about by mechanical transport created a revolu-

tion in the importance of continental areas, in commercial staples, in business organisation, and in finance. It has also produced vast social changes, the most important of which is the question of emigration and immigration the latter being the more pressing so far as the British Empire is concerned.

CHAPTER XI

THE GOLDEN AGE OF BRITISH CAPITALISM

The quarter of a century which followed the repeal of the Corn Laws in 1849 has often been called the Golden Age of British Capitalism. It was certainly a period of rapid and almost uninterrupted economic expansion; there was a great and rapid increase both in the volume and value of British Overseas Trade and in the scale and development of British Industry at home. The period witnessed the development of railways and steamships, the post and the telegraphs, the telephone and the printing press which revolutionised men's ideas about time, distance and gravity. Machinery helped man to conquer all these things and his mastery over natural phenomena opened a rich vista of unparalleled economic prosperity for him. Engineering trades also developed and science began to be applied to improve the moral and material progress of the English nation. Machinery was spreading and making new conquests daily and the iron and steel trade together with coal mining

therefore got a powerful stimulus from the application of mechanical power to land and sea transport and to manufacturing industries. But for two chief set-backs (the unemployment in Lancashire due to cotton famine resulting from the American Civil War in 1861-63, and the decline of the silk industry due to the Cobden Treaty with France, which abolished duties on French silks) this period of 25 years was without any serious rival for Britain in the colonial, industrial, and commercial fields and therefore, it saw her develop in the words of Mrs. Knowles into "the forge of the world, the world's carrier, the world's ship-builder, the world's banker, the world's workshop, the world's clearing house and the world's entrepot. The trade of the world during this period pivoted on England. She was organised for a world economy."

Indeed, except for short periods in 1854-55, 61-62 and the serious commercial crisis of 1867, British trade showed a continuous progress, reaching the peak between 1869 and 72. During this period British export rose from £53 m. in 1848 to £250 m. in 1872-73. Of course, the prices were nearly 40 per cent. higher at the latter date than at the former, but the

progress was remarkable even after the necessary adjustment in respect of prices is made. Imports also increased rapidly from £152 m. in 1854 to over £370 m. in 1873-1877. Thus, throughout this period the imports were greater than the exports, the surplus representing heavy capital investments overseas by the country. Mainly, these took the form of railway investments abroad in the late 'thirties and 'forties. By 1875 the total of British holdings overseas has been authoritatively estimated at about £1,200 m. and increased in the early 'seventies at the rate of a little less than £40 m. *per annum*. British shipping earned by the same date about £50 m. *per annum*. Thus, these huge investments were a sign of Britain's rapidly expanding interest in overseas trade with almost every region.

Cotton goods were the most important article of export throughout the period, being about one-third of the total exports in 1854 and rather more than one-third in 1870. Woollen goods came next. A very great increase also took place in the exports of iron and steel and machinery which rose from £5 m. in 1848 to £24 m. in 1870 and £36 m. in 1872-73. Exports

of machinery rose from under £1 m. in 1848 to £10 m. in 1873. Similarly the exports of coal rose from £1 m. in 1848 to £13 m. in 1873. Still even in the boom year of 1872 cotton exports (worth £80 m.) were greater than Iron and Steel, Machinery and Coal put together (value £54.5 m.). The export of capital from England though remarkable does not constitute such a prominent feature of this expansion of British overseas trade as the huge development of ordinary trade in common consumers' goods which these figures indicate. Indeed, it may be said that "in the third quarter of the nineteenth century Great Britain clothed the world receiving in return a steadily increasing volume of raw materials and foodstuffs to supply the needs of her industries and of her citizens."*

Throughout this period, the U.S.A. was Great Britain's best single customer, followed in the 'fifties and 'sixties by India which was rapidly expanding as a market for British goods during this period taking £9 m. of British goods in 1854 and of £24 m. in 1874. Germany stood third increasing its share of British exports from £8.5 m. in 1854 to nearly £32 m. in 1872.

*G. D. H. Cole.

France, China, and Australia were other important markets. In 1854 72.1% of British imports came from foreign countries, and the rest from within the Empire. In the same year nearly 40% of the exports went to foreign countries and the rest to within the Empire.

This is enough to show the general character of commercial expansion during the period. To what causes was it due? An obvious answer made both at the time and subsequently is, that it was due to *Free Trade at Home and Free Trade abroad*, for there was a marked improvement towards greater freedom of trade in Europe in the 'fifties and 'sixties largely under the influence of the success of Great Britain under Free Trade. But this is by no means a complete answer. The repeal of Corn Laws led to Free Trade but the structure of Free Trade was incomplete until 1860. In the same year France entered into a Commercial Treaty with England known as the *Cobden Treaty*. While the repeal of Corn Laws permitted almost free imports of corn into the country, the imports had little effect upon the price of corn. The average level of wheat prices was actually higher in the 'fifties than in the 'forties and after a sharp fall in the early 'sixties again

rose higher. Meat prices were at a fairly high level between 1853 and 1875. Moreover, not even until the 'sixties was there any very great increase in the importation of wheat though the annual averages of wheat imports show a rise after the repeal. Just before it the average annual imports were under 2 million quarters. This was doubled in the late 'forties, rising to $5\frac{1}{2}$ m. qrs. between 1856 and 1860 to $8\frac{1}{2}$ m. in the 'sixties and to nearly 12m. in the early 'seventies. The increasing imports led to no decrease in the area under corn. Indeed, it was quite the reverse. There was a very marked rise in the level of land prices, agricultural rents and even agricultural wages.

Free Trade thus affected British agriculture favourably rather than otherwise. It enabled her, moreover, to enter into commercial treaties with other countries, like the Cobden Treaty and others which were based on the 'most favoured nation clause' treatment for the British exporter. Moreover, the general course of tariffs in Europe was downward at the time. This produced a great growth of inter-European trade and even the American Civil War (1860-1865) stimulated it. Meanwhile free trade stimulated trade and

production. In general, it was not British policy alone but many other circumstances that contributed to the total results.

A more important cause for British prosperity during this period lay in the very great advance in productivity in all parts of the world but particularly in Great Britain during this period following upon the great improvements in communication by land and by sea. We have already glanced at British agriculture under free trade. In other industries too, production rose very greatly:—

Coal production rose from 65 m. tons in 1854 to over 130 m. in 1875.

Pig Iron rose from 3 m. tons in 1854 to over 6 m. in 1875.

Steel production increased four-fold between 1850 and 1870; three-fold again by 1875, doubling itself again by 1881.

Other countries like France, Germany and the U.S.A. were making as remarkable progress in iron and steel at the same time. Indeed, while in 1850 Great Britain made nearly thrice the steel made by all the European countries put together, in 1870 she made less than they did collectively. The yardage of cotton cloth

made in Britain went up by 130% between 1850 and 1870 and by 200% between 1850 and 1880; woollen goods increased by 69% in the same period. Railway receipts rose from £20 m. in 1854, to £61 m. in 1875, while shipping clearances rose during the period from $9\frac{1}{2}$ m. tons to $23\frac{1}{2}$ m. tons. Thus, in every direction production and trade were increasing as a result of new inventions and discoveries and of improvements in business organisation and commercial law. It may be noted that the principle of limited liability which has made joint stock business so popular since was adopted in England in 1855 and the Company law was consolidated in 1862. Joint stock enterprises flourished exceedingly in the succeeding decade, nearly 17,000 new joint stock companies coming into birth between 1862 and 1880.

Moreover, the new gold supplies exercised a very stimulating influence upon production and trade. Gold was discovered within the period at many places in Canada, and Australia particularly between 1848 and 1852. The new gold supply tended to raise prices and to produce confidence as well as hasten the development of the country where it was discovered. Between

1849 and 1873 there was, barring short periods, a steady rise in prices to 21% above the price levels of 1846-47. Food prices, however, remained on the whole a good deal lower than the prices of industrial goods, never rising above 7% of the 1846-47 level by 1873. There was a great rise in the standard of living.

Thus, the period witnessed a series of new devices and improvements in mining, manufacturing, transportation and agriculture. 'Ring' spinning, improved looms and combing, etc. in the textiles; the Bessemer; the open hearth and basic processes in steel and iron; chemical discoveries and manufactures of aniline dyes, the making of ice and cold storage, and the increased size of business establishments and the development of scientific and mechanised agriculture—these were the outstanding features of the period. Every kind of production and trade registered a considerable advance. Factories, machineries, docks, harbours, steamships, rail roads, locomotives, cars, etc. multiplied very fast and increased the supply of everything they made or transported. Between 1848 and 1878 coal production increased from 40 m. tons a year to 120 m. tons, the yearly production of iron was tripled and ship-

building rose from 100,000 to 1,400,000 tons, and the value of annual exports was somewhat more than three times in 1878 as in 1848. England in short became the workshop and the greatest commercial country of the world.

Besides, intensified productive activity specially in the metallurgical industries and a phenomenal expansion of trade with the Empire countries and with U.S.A., China, Japan, Siam, etc. and a series of new commercial treaties, other important causes of this Victorian prosperity were the rise in prices due to gold discoveries, rise in wages and steadier employments, improved conditions of work in the factories, co-operative stores and increased functions of municipalities which introduced better and improved amenities of life in the towns like supply of water, gas light, roads and main drainage systems. To meet the growing demands of the expanding trade, industry and transport, large accumulations of capital, joint stock enterprise, improved banking credit and insurance facilities, etc.* were also organised and developed.

* *Knowles*: Industrial and Commercial Revolutions.

* *C. R. Fay*: "When the world lived on Lancashire Cotton, Cardiff coal, and the London Money Market, the policy of free trade was justified by the facts."

CHAPTER XII

LEADING BRITISH INDUSTRIES SINCE 1875

The Cotton Industry :—The British Cotton Industry is characteristic of the period of Industrial Revolution in its development and structure. Its early growth was closely associated with certain fundamental technical inventions involving the use of power machinery and the emergence of the factory. It has been in the words of Prof. C. R. Fay “the classical example of territorial centralisation.” The enormous growth of the British foreign trade of the 19th century was largely due to its growth and development and for many years the cotton trade of Lancashire dominated the commercial policy of the country. Even when other foreign industries ousted it from its position of dominance it was able to adjust itself to the altered conditions of demand and to find outlets for itself. Yet its organisation, in the words of Dr. Marshall, was largely automatic and not conscious. The principles of the modern economic organisation are nowhere expressed better than in the cotton trade.

Its early growth:—When the East Indian Cottons had created changed habits of consumption in the 17th century conditions of demand favourable to its growth had already been created, but a technical transformation of the old processes was essential before a full advantage could be taken of this change in fashion. This condition was fulfilled during the latter part of the 18th century when a series of important inventions first in spinning and then in weaving took place. Thus, one of the most fundamental causes of the growth of this industry in England was the series of mechanical inventions. This change in the technique of production altered the organisation of the industry as well. By 1800 cotton spinning became a factory trade although it was not until 1815 that steam power displaced water power and the self-acting mule made of metal was invented in 1825 by Crompton. In the weaving branch the change came later. Cartwright's power loom was patented in 1787 but it was not until 1822 that the power loom was a commercial success and it was not until 1841 that the power loom assumed approximately its modern form. After 1830 weaving passed to

the mills but it was not until 1860 that the handloom was completely destroyed.

The leading position which the cotton industry enjoyed until the 19th century was due to a number of causes. The great mercantile and colonial development of England placed her in a strong position to obtain supplies of raw materials and to serve as her foreign customers. The countries producing cotton were not then ripe for industrial development and this fact together with the nature of the raw material and its low cost of transportation led to the concentration of the industry in Lancashire which had some physical advantages for the manufacture of cotton piece-goods. The climate of Lancashire is humid and it has abundant water for bleaching and printing and coal supplies to generate steam power. The structure and fineness of the cotton textiles require a humid climate—an advantage which together with the momentum of an early start helped her to maintain the supreme position as a producer of the cotton goods in spite of the fact that not a pound of cotton is grown within the country. Further, old centres of the industry like India were handicapped by their social customs and traditions in adopting the

new manufacturing methods, and the continental countries in Europe suffered from political troubles. Then, when the industry became mechanised, her galaxy of engineers and mechanics worked out a new technique of production. To obtain raw materials and to send out the finished goods, Liverpool helped by the Manchester Ship Canal served as a very powerful outlet. Besides this, on account of the supersession of the Domestic system of production and the contemporary Agrarian revolution a large supply of labour became available to carry on production in mass. It was further helped by a contemporaneous commercial revolution caused by the railway and the steamship which made it possible to import raw materials from Egypt, the U.S.A. and India and helped her to distribute the manufactures among the teeming millions of the "Empire in Trust."

With the gradual development of the industry its organisation was perfected and the joint stock enterprise and limited liability enabled England to obtain vast quantities of capital for her expanding industry. The magnitude of the development of the industry can be judged from the following figures of cotton imports :—

Period.	Quantity in million lbs.
1800-04	.. 56
1820-24	.. 152
1850-54	.. 907
1900-04	.. 1,580

The onward march of the industry had been checked only on three occasions:—(1) 1860-64, when Lancashire suffered from a cotton famine due to the American Civil War, (2) 1875-79, when the depreciation of silver hit hard India and other silver using countries, and international competition became more active, and (3) 1885-99. By the beginning of the 20th century, however, the industry again began to expand when cotton imports were 2,000 m. lbs. in 1910-13. But these imports do not bring out to the full extent the expansion of the industry after 1900 because on account of its concentration on the production of finer yarn and cloth, the value of the cloth increased faster than the rate of imports. In the decade before the war the purchasing power of the primary producers of the world on account of the unprecedented demands of the Industrial Revolution increased very much, and as they constituted the leading customers of Lancashire goods, the exports of cotton textiles

grew accordingly. The expansion of the industry is further shown by the number of the spindles which increased from 42½ millions in 1885 to over 59 millions in 1914—an increase of 44 p.c. The number of looms increased from 5,46,000 to 8,05,000 between 1885 and 1915. Similar evidence of its expansion and growth is furnished also by the figures of employment when the number of insured workers increased from 5,44,000 to 6,20,000 between 1900-11.

Causes of the Decline of British Cotton Industry:—

On account of the causes enumerated above the cotton industry of Lancashire obtained a leading position in the international trade of G. Britain and for well-nigh a century up to 1913 its expansion was almost uninterrupted. Her exports were far greater than the sum of the cotton exports of the rest of the world, and they were still growing very fast. The decade before the War was particularly prosperous and the marked slackening of progress during the last quarter of the 19th century was merely a temporary phase preceeding a period of unexampled prosperity. There was an element of weakness in its extreme dependence on foreign markets whereas the production of other countries was consumed

locally. During the first decade of the present century in spite of the British proportion of the world's output of yarns and piece-goods declining, her share in the international trade showed only a slight fall. In 1909-13 it amounted in value to about 65 p.c. of the total. This decline in the relative importance of the British cotton industry was not due to the competition of other exporting nations but to the growth of a spirit of aggressive economic nationalism and self-sufficiency in several countries. Even this relative decline accompanied as it was by a great increase in absolute magnitude was of small account.

“With the outbreak of the war, the expansion of the cotton trade ceased. Between 1914 and 1920 spindle and loom capacity was stationary and the labour force slightly declined.” On account of the shortage in shipping the obtaining of the supplies of raw material and the sending out of the finished goods specially to distant markets were rendered difficult. Then between June (1917) and February 1919 the Cotton Control Board composed of the representatives of employers, trade unions and the Government regulated the trade and rationed the limited

supply of cotton by fixing the maximum percentage of machinery to be worked in each establishment. Concentration of production on the higher grade goods, which was dictated by the shortage in shipping, turned the oriental customers for low quality goods to get their supplies from other countries like Japan and the U.S.A.

Immediately after the war, the unprecedented rise in the price of silver increasing the purchasing power of the Eastern markets created an urgent demand for Lancashire goods. As the capacity and output could not be expanded sufficiently to meet this demand, windfall profits were reaped by spinners and manufacturers—the former for example, received a profit of 1s. 6d. a pound in 1920 as compared to over $\frac{1}{2}$ d. a pound in 1912 on spinning medium counts. It was essentially a price boom and the output remained well below the 1913 level. When towards the end of 1920 the boom broke, prices and output of yarns in 1924 was 30 p.c. and that of piece-goods 33 p.c. less than in 1912. The annual average volume of yarn exports in 1921-23 was only 75 p.c. and of piece-goods under 59 p.c. of those of 1910-13. Some improvements in exports occurred in 1924-25, the highest

export point in the post-war period. "Since then the decline has been progressive. The industry even failed to share in the expansion of British production and of exports during 1928-29 and output fell steeply in the depression of 1930. The number of insured workers in the industry declined from 5,72,000 in July 1924 to 5,55,000 in July 1929" and ever since the slump of 1920 short time has become common in large sections of the industry. True it is that there was a general decline in this industry upto 1924, because the world's consumption of raw cotton and international trade in cotton manufactures were lower than before the war, yet Britain had suffered the most in this decline. Since that time the output of the world's cotton industry has increased to a moderate extent but the British output has been subject to a continuous decline. The decline in British yarn exports seems to be a symptom of the general decline in the world's cotton yarn trade for Britain appears to have retained her pre-war share of 1/3 of the total. Probably the world trade in piece-goods also continued to decline but most of the competitors of Lancashire increased their exports after 1924 and the decline in the world trade was

entirely due to the shrinkage in British exports which declined from 65 p.c. in 1909-13 to 47 p.c. in 1928. Thus, in yarn exports she had only maintained her share of a diminished total while in the piece-goods trade her loss had been greater than the diminution in the aggregate world trade.

Except in Great Britain the cotton trade has grown substantially since pre-war days. The development has been rapid in Japan, but all over the Far East this tendency is noticeable. Between 1913 and 1925 number of spindles rose by 181 p.c. in Japan, in India by 31 p.c., by 18 p.c. in the U.S.A. and by only 2 p.c. in Great Britain. The number of looms rose about 119 p.c. in Japan, 64 p.c. in India and perhaps 20 p.c. in the U.S.A. as against a decrease of 2 p.c. in Great Britain. Besides this increase in the mill-made cloth the handloom production in India grew by about 16 p.c. from 1913-26 and in China by more than 50 p.c. In fact, China produces far more cloth on handlooms than she either weaves in her factories or imports from other countries. Messrs. Daniels and Jewks *e.g.* in 1927 estimated handloom production at 870 m. lbs. against total net

imports of 26½ m. lbs. and domestic mill output of 27 m. lbs. Even other countries of Europe and America show an increasing tendency to develop their own manufactures of cotton goods. Thus the greatest Eastern markets are being filled not only by factory output of Japan, India and China but to an even greater extent by hand made cloth, largely woven from yarns spun in the factory. This loss of the foreign markets, and not the vagaries of the home demand or defects in its organisation is the main cause of the deep depression in the British cotton industry. This is a factor full of significance for the diminished and still falling cotton exports of Great Britain which has been used to exporting well over four-fifths of its total output. This rapid industrialisation of the Far East is by far the greatest single factor in the decline of the British cotton trade. It is true that between 1912-24 the home consumption of cotton manufactures declined on account of changes in fashion, but this decline was not proportionate to the total decrease in output and since 1924 the home demand has changed very little and the industry has adjusted itself to these fashion changes by producing increased quantities of yarns for the hosiery trade

and the manufacture of artificial silk and mixed fabrics. But in the foreign markets the heavy losses in the main classes of goods have not been mitigated by the development of export in mixed fabrics. The decline has occurred mainly in the cheaper lines of goods and in the countries purchasing principally the lower qualities—India, China, the Balkans and the Near East, while the exports to countries taking high priced goods has suffered little. India and the Far East took over 60 p.c. and the Balkans and the Near East 7 p.c. of the total piece-goods exports in 1913 and in subsequent years this position was maintained, but, in 1929 the exports to India were only 42 p.c., to China and Japan only 29 p.c. and to the Balkans and the Near East only 47 p.c. of those of 1913. About $\frac{7}{8}$ of Lancashire's total loss of exports since the war has been sustained in these markets, and this in spite of the maintenance of their consumption by these countries.

An explanation of this is to be found not only in the increased Indian and Chinese mill production and hand loom production but also in the political turmoil (the Non-co-operation and Civil Disobedience) and the accompanying

boycott and Swadeshi movements in India and the civil war in China together with the vagaries of the silver exchanges and finally in the formidable Japanese competition specially in grey, mixed and artificial fabrics in India and China, E. Africa, Near East and the Balkans.

The output of the Indian mills for example, increased from 1,164 m. yds. in March 1914 to more than double this quantity by 1930; while the imports from Great Britain declined from 3,068 m. yds. in 1914 to 1883 m. yds. in 1930. While in 1914 the total output for home consumption and export from the Indian mills was 27% and that from Great Britain was 71%; the proportions in 1925 were 52% and 42% but in 1930 they were 56% and 29% respectively. In addition to this increased Indian production, Japan, which was a negligible factor in the Indian import market in 1914, not only secured a foothold in the Indian market but also succeeded in increasing her proportion of the Indian import trade at the expense of the British in grey goods. Recently both the Indian and Japanese mills have begun to compete with Lancashire also for finer fabrics and finished goods. But the import trade in yarns of higher counts than 40 is still

in the hands of Lancashire. The total volume of her trade, however, is only just over half that of 1913. Similarly in China, while Great Britain supplied 56% and Japan 18% of the total value of China's imports; in 1928-29 Japan supplied 67% and Great Britain 22%. Japan has also ousted her from East Africa, Near East, etc. Italy and America have also become competitors of Lancashire in the Balkans and the Near East and in Central and South America. The great natural advantages of the east for large-scale manufacture of cotton—home grown raw materials, extensive home markets, cheap and adequate labour supply and hydro-electric power were reinforced with the increased purchasing power of their teeming millions during the War and protective tariffs. Then political disturbances and boycott movements revived domestic industry. The high price of American cotton and higher wages in England as compared to Japan further placed her in a disadvantageous position. In the depression and post-depression period the purchasing power of both Indians and Chinese was considerably reduced because prices of primary products fell more steeply and thus the Lancashire export

trade was still more depressed on account of their reduced consumption or purchase of cheaper substitutes. Moreover, agricultural depression transferred capital to industries, while the Japanese industry received a double stimulus in reduced wages and fall in the value of the yen.

Coal Mining—The economic importance of coal to the industrial development of England can be judged from the fact that it provides motive power to the industries, has been responsible for the establishment of great metallurgical industries and has revolutionised both land and sea transport. In the words of Prof. Fay "On the material side coal was the efficient cause of the industrial revolution". It has formed the basis of her economic structure and has enabled England to have the benefits of an early start. Localisation of industries has been determined by the abundance or dearth of coal and has enabled England to specialise in manufactures for a world-wide trade by providing cheap and abundant fuel. It has been throughout the nineteenth century^{*} the most important

*"The output of coal in million tons rose from 20 in 1857 to 65 in 1873. In the early 60's it passed 100 and was 200 in 1897. Thus the Victorian age was the great coal age, with Puffing Biliys at the portal and steel steamships at the door." C. R. Fay.

single commodity of export which provided employment to the shipping as well as reduced the freight rates. On account of these conditions the whole coal industry has been regarded in England as the key to its economic supremacy.

For a century before the war it enjoyed an almost uninterrupted expansion which made it the greatest of English trades. The annual production which at the beginning of the 19th century was only 10 m. tons rose to 287 m. tons in 1930. In fact in the half-century before the Great War the output has more than trebled. The statistics of employment show still greater expansion, for the number of workers increased from 2,00,000, in 1815 to 11,29,000 in 1913 and the proportion of the population employed in it increased from 3-4% in 1881 to 5-6% in 1911. This great expansion of the industry was due to increased foreign demand which is evidenced by the fact that the export trade in coal which amounted to over 10 m. tons in the 'seventies rose to five times this figure by the end of the century and accounted for 24 p.c. of the output and in 1913 it was 78 m. tons or 1/3 of the country's production. The statistics of the values of exports also reveal the same story. In the

'sixties coal accounted for only 3 p.c. of the total value of exports, but in 1913, it was above 10 p.c. This period of the expansion of the industry synchronized with the development of factories in Europe and the introduction of the railway and the steamship and the expansion of tonnage of ocean-going shipping. This rapid growth of the industry, however, concealed the instability of its position which related to the working of less and less fertile mines and seams and the consequent rise in the cost of production. In other words, there was no improvement in its organisation and technique.

Great many changes occurred in the war and the post-war period in every aspect of the coal industry. The industry was very adversely affected by several extraneous causes. On the side of production the war starved it of equipment owing to the necessity of economising manpower for war, mining was confined to easily accessible seams and therefore the output declined from the 1913 level. On the marketing side the European demand was cut off and the trade was restricted to conserve the limited supply for domestic needs. Government's intervention and control over the industry had

disorganised it which prevented the industry from meeting the huge demand after the cessation of the war. Domestic prices were fixed by the Government at a low level, but the price of licensed exports soared very high on account of the urgent requirement of the continent. Then the period of the boom was followed by a depression which brought down export prices, and led to a hasty removal of Government control of production and prices and of the limitation of export. The industry had a breathing time to reconstruct itself but a series of fortuitous circumstances delayed its reorganisation. These were :—

- (1) A sixteen weeks' strike in the U.S.A. coal fields which gave a support to the British industry.
- (2) The occupation of the Ruhr valley in 1923 reduced the German output and gave an impetus to the British industry for a year. During this period high profits were earned, wages were raised, and the labour force was considerably expanded.
- (3) When the world's normal supplies were restored, reorganisation was further de-

layed by the grant of a Government subsidy to the mine owners from August 1925 to May 1926 with a view to revive the export trade.

The subsidy led to a temporary revival but in 1926 a national coal strike due to the dispute about hours of work and wages interfered and it was only in 1927 that the industry was freed from the abnormal influences of temporary demands and subsidies to adjust itself to the changed conditions of the post-war period. Thus, the normal process of adjusting the industry's organisation and resources to rapidly changing world conditions was delayed for more than a decade.

Causes of recent depression in the coal trade:— The development of the coal trade has been greatly retarded in these years mainly because of the economies effected in its use and of the use of alternative sources of power, viz. electricity, alcohol and oil fuel. The economies in the use of coal have been brought about by improvements in boiler and furnace technique and by its conversion into electrical energy, while the generation of electricity by lignite and water power has displaced it in Italy, Germany,

Canada, India etc. The growing use of hydro-electric power for manufacturing and transport purposes has been a factor in retarding the rate of increase in the world's coal consumption. These changes have been accompanied by a revolution in transport due to the perfection of the internal combustion engine and by the reduction of oil prices. The growth of road transport has retarded railway development to the detriment of the coal industry, and oil burning and motor ships have taken the place of coal burning steam ships. Oil fuel is also being extensively used for industrial purposes. Then the high price of coal between 1914 and 1920 not only fostered the search for substitutes but it also led to the production of coal in countries that were formerly dependent on imports chiefly from England and during the last decade this capacity in operation in various countries has been maintained by tariffs, general prohibitions or import licences. The development of these additional coal producing resources has resulted in a large surplus capacity in the industry and the difficulties arising from this over-capacity have been accentuated by the inelastic nature of the demand for coal.

Magnitude of the loss of the British coal industry—

The British coal industry being a staple export trade has been the chief sufferer from these causes. Upto 1925 the decline in the British coal industry may be regarded as a symptom of the general decline. But between 1925-1929 the annual output of the continent showed a steady increase, e.g. in 1928 it was 27 p.c. higher than in 1909-13 and 36 p.c. higher in 1929, while the output in England in 1929 was still 4 p.c. under that of 1909-13. The labour force, which reached its maximum in 1924, fell below its pre-war figure between July 1924 and July 1930, the number of insured persons declined from 1,260,000 to 1,070,000 and the percentage of unemployment in the period 1927-30 ranged from 14.6 p.c. to 26.8 p.c. Since the great dispute of 1926 the profits of the industry have been very low and real wages are less than in 1913.*

*Relative Decline of British coal industry and its causes—*There are many causes of this relative decline of the British coal industry. *Firstly*, there has been a reduction in the internal consumption to the tune of 6 p.c. from 1913 due to "the introduction of more economical grates, and

*G. C. Allen: British industries and their organisation.

the greater use of gas and electricity for heating." The increased production of gas between 1913 and 1929 did not lead to increased consumption of coal by the gas industry because of the improved types of carbonizing apparatus like the continuous vertical retort. The depression in the pig iron branch of iron and steel industry, and the introduction of more economical furnaces led to the decline in consumption of coal by the iron and steel industry. The consumption of coal for general manufacturing purposes has also declined. The use of gas and oil fuel in furnaces, the replacement of steam-driven by electrically-driven plants and the more economical utilization of coal were the main causes of the lack of buoyancy in this demand. *Secondly*, the British coal industry sustained even heavier losses in foreign markets. In 1925 the coal exports were only about $\frac{2}{3}$ of those of 1913 or about 78 p.c. of the average exports of the period 1909-13. The same is true of the sale of bunker coal. The development of domestic production in countries previously her customers and the greater competitive power of other exporting nations due to artificial stimulus to exports together with the failure of the British coal industry to bring her

cost in line with those of other countries due to the age of the industry, the reduction in the hours of work from 8 to 7 by the legislation of 1919, the British financial policy reflected in the restoration of the pound sterling to its pre-war gold parity in 1925 in contrast with the policy of devaluation adopted by other coal producing countries, greatly increased the difficulties of the exporting sections of the industry. *Thirdly*, the culmination of adverse influences *viz.*, the growth of oil and hydro-electric power, the increased use of lignite, economies in combustion and the development of new coal resources in the foreign markets, dealt a severe blow to the coal industry of Britain. "In the difficulties common to the coal industry of all countries, the greater age of the British industry, involving an earlier and less efficient lay-out of mines and a greater exhaustion of easy coal, was sufficient to pick it out to be the principal sufferer" (*Sir W. Beveridge*).

Fourthly, the failure of the industry to increase the efficiency of its organisation and methods as quickly as the continental competitors were improving theirs was also responsible for its decline. The average output per person employed in coal mining was 257 tons in 1909-13,

in 1919-23 it was only 195 tons and in 1924-25, 221 tons. Since then there had been a marked recovery owing to the restoration of the 8-hour day in 1926 and to more economical methods of mining with the result that in 1927-30 the annual average output per man rose to 257 tons again. But in Germany and Poland at any rate, the rate of expansion since 1924 has been much faster than in this country. Probably the greatest weakness in the industry is in its organisation rather than in technique and some of its difficulties are undoubtedly traceable to its failure to adjust its organisation to the needs of the post-war period. There has been a lamentable lack of imaginative leadership and even commonsense among the owners of the industry who have been misled by the comfortable delusion that, because the changes in the post-war period were due to abnormal circumstances beyond their control, therefore, they must await patiently the restoration of the pre-war normal conditions when the industry will automatically adjust itself and will come to its own. They have thought that a standard of efficiency is a fixed and not a moving standard and that an organisation, which was adequate in 1914, may be so also in 1934.

The periods of temporary prosperity and the very success of the industry in pre-war years when "every mine that worked could pay without worrying about efficiency" prevented a realisation of the necessity for improved and changed methods. "In spite of the continental experience and the world tendency towards co-operation among producers and criticisms of expert commissions of inquiry," they have steadfastly adhered to their traditional individualistic system and only official compulsion has obliged them to develop a unified marketing scheme. Then serious upheavals in industrial relations like prolonged national strikes and lock-outs at critical periods in 1920-1921 and 1926 have hastened the resorts of customers to other sources of supply and have deflected the attention from the essential problem of rationalisation to a dispute between rival claimants to the diminished spoils. Further the behaviour of the Government towards the industry has not been very helpful. By reducing the hours of work in 1919 they attracted fresh labour into it and by increasing the hours of work in the depression in 1926, they swelled the volume of the industry's unemployment; by permitting the sale of coal at

exorbitant prices to the foreigner in the post-war period they stimulated the development of alternative sources of power. But in 1925 they subsidised the industry to provide the foreigner with cheap coal at the expense of the taxpayer and in 1930 to do the same at the expense of the domestic consumer.

Fifthly, it is argued that wages form a high proportion of the total costs of production in this industry and that the lower wages of continental miners are the chief cause of the British losses. According to the findings of the League of Nations the British wages per ton are the highest in Europe. Hence it is claimed that the only solution of the British industry lies in the readjustment of wages to a competitive level. This can be done either by raising the foreign wages by international agreement, or by the lowering of wages in the British mining and transport industries. But it is forgotten that "differences in national wage levels are ultimately determined by differences in the efficiency of labour, and there is no reason for supposing that wages in a particular industry are too high or too low unless they are greater or less than those earned by workers of similar skill and efficiency in other

trades in the same country. If no marked disparity of this kind exists, then a reduction of wages is not the appropriate remedy for a protracted depression in the industry. Unless, therefore, the British miner's wages are higher than those of other classes of British workers with equivalent skill, it cannot be argued that a reduction of wages in the coal industry would solve its problems." "In the case of British mining it is clear that the depression cannot be due to any increase in British mining wages relative to those of the continent, for the gap between them has been narrowed down since 1925. What has really happened is that for various reasons the continental industries have become relatively more efficient." The other expedient of raising foreign wages to the British level may be ruled out because it may lead to more rationalisation and better efficiency in mining in those countries or to discharge of labourers from the coal mines and a further reduction in wages because of greater competition. The British industry would not therefore benefit from such a course. "Silesian miners are not going to be starved at the behest of the pundits of the International Labour Office in

order that more miners may be employed in England.” (*Prof. Cannan* in *Economic Journal* 1930.)

Sixthly, the world trade depression of 1929—31 has strengthened the forces that have been causing a decline in this industry. “About half the total loss has occurred through the decline of the demands from Russia, Germany and the Scandinavian countries.” Japanese coal has displaced British in the Pacific; reparation deliveries and German competition have reduced the British market in Italy; in Spain and S. Africa home production has replaced the British imports and oil has destroyed the British market in South America. Even after 1931, when other industries began slowly to recover, the fall in coal production continued and employment shrank still further. In 1933 the output was nearly 20 p.c. less than in 1929 and about 28 p.c. less than in 1913 and any substantial revival occurred only in 1934. This slight improvement has been due chiefly to the favourable influences of exchange depreciation on the competitive strength of the exporting section. The decline in the home demand has accounted for about one half of the reduction in output. It has been

due chiefly to the decreased demand for coal for manufacturing purposes and especially for the iron and steel trade and although this demand is now reviving, yet on account of the economies in its use and the substitution of the cheaper sources of power and heat, the coal industry is scarcely likely to share proportionately in the present trade recovery.

Seventhly, the coal industry has been liable to frequent fluctuations in the demand for its production on account of the instable character of the heavy constructional industries and shipping and the seasonal demand for household coal.

Recommendations of the Coal Commission 1925—

(1) There is extreme diversity to be found in the structure of the coal industry and in the quality and output of the mines. To avoid this, they recommended planning of the industry on rational lines. (2) Four-fifths of the coal consumed in the country is burnt in a raw state in hearths, factories, locomotives, ships and for generation of electricity after it has been washed and impurities have been removed. This leads to much waste. To avoid this the commission recommended the grading of coal and the

practice of blending different types of coal to provide special grades of fuel for specific purposes at lower cost. They further recommended the extension of those methods which permit the utilisation of all the constituents of coal. (3) The diversity in the size of the various units leads to wasteful methods of production and higher costs. To remove this the commission recommended the encouragement of amalgamation and mergers of smaller units into bigger companies which should avoid a good deal of management expenses. (4) They further recommended the substitution of co-operation for individualism in management by the establishment of planning departments to control output and unified marketing organisation to bring economies into marketing operations and to improve control by fixing quotas for the various mines. (5) They recommended the introduction of mechanised mining to contract the rising costs of production due to the operation of the Law of Diminishing Returns. (6) They advocated co-ordination and co-operation between the parent coal industry and the various ancillary trades like coke-ovens, blast furnaces, steel-works, chemical factories and electricity generating stations, so that eco-

nomies may be obtained in poorer production and valuable bye-products utilized.

Even before the depression, the industry was trying to solve the three technical problems of deeper working, mechanical haulage and ventilation. To overcome the difficulties and costs of deeper working mechanical operations are essential. Metal cages, wire rope and the steam engine to pump out water and winding up coal, and steam jets to propel air through the shafts, and mechanical conveyors have been introduced. The depression still further strengthened all the forces that have been causing a decline in the industry so that it is highly improbable that this industry will enjoy again a period of progress similar to that of pre-war years. Science may discover new uses for coal but no forecast can yet be made to hold out any prospects of a revival of the demand for coal to pre-war levels.

Meanwhile, important changes have been going on in the reorganisation of the industry. The hours of work were raised from 7 to 8 in 1926 but again restored to 7 in 1930. In 1930, the Coal Mines Act was passed to regulate the production and control sales. It also provided for the creation of a Coal Mines Reorganisation

Commission to promote amalgamations among colliery owners. The chief importance of the Act lay in its provisions for the limitation of output and for the control of minimum district prices. Amalgamations have been made though this policy has met with strong opposition from the owners. In spite of the compulsory powers that it possesses, the progress of amalgamations has been slow. 31 amalgamations have been effected and the Commission has pressed strongly for the nationalisation of mining royalties in order to give a free chance to the new organisation. The Commission only deals with amalgamations. But, in the words of Mr. G. D. H. Cole, "What is wanted is a general supervising authority for the whole protracted business of putting the coal industry on a sound economic basis."

Iron and Steel Industry:—The iron and steel industry is by far the most important characteristic feature of modern industrialism. Its importance can be gauged by the fact that all land and sea transport, mechanical methods of production, civil engineering and building are all dependent on it. It has formed one of the most important organised industries of the country. Ever since the

dawn of modern industrialism the industry has passed through various vicissitudes and unlike the cotton trade has been repeatedly and vitally affected by the discovery of new processes of production in its magnitude, organisation and location.

The new methods of production by 1830 had changed the localisation of the industry from areas of water power and forests to those of iron ore and coal. Dispersion had given place to a high degree of concentration and about $\frac{2}{5}$ of the total pig iron output came from South Wales and about $\frac{1}{3}$ from Staffordshire. The wrought iron trade was also mainly localised in these two centres. In the meantime two processes made possible the production of high grade material. These were Benjamin Huntsman's crucible process of making cast steel about 1740 and the process of shear steel. By the end of the Napoleonic wars Sheffield became the centre of the steel trade and was exporting to the continent instead of importing. The introduction of the cast and shear steel stimulated many iron using trades such as engineering. Subsequent technical discoveries were mainly in the field of fuel economy. Neilson's discovery by 1831 led to the

creation of the Scottish iron industry. The hot-blasts resulted in smaller fuel economies in England than in Scotland. A further saving of fuel was effected in 1845 by Budd's method which brought into existence a new type of furnace. In the wrought iron branch of the trade, two inventions before the middle of the century were effected. These were Joseph Hall's pig-boiling process which improved the puddling furnace and the other the steam hammer invented by Nasmyth in 1839 which "was widely used during the next decade for shingling, *i.e.*, removing the scale and slag from balls of iron in their passage from the puddling furnace to the rolling mill."

The period from 1830 to 1870 witnessed a huge increase in the "make" of iron. The output of pig rose from about 7 lakh tons a year in 1830 to an annual average production of 3,800,000 tons in 1859 to 1861 and to over 6½ million tons in the boom of 1871-73. This was due to the development of the railway and iron-steam ship and to new products like galvanised sheets. By the middle of the century, exports grew rapidly and the world became dependent on British supplies of finished iron for transport.

equipment because the continental countries had still numerous charcoal-furnaces except Belgium, whose output was too small to be a serious rival. Moreover political trouble checked the industrial advance of these countries. The British supremacy in the industry remained unassailable. To meet this increased demand new producing areas had come into existence in Scotland, North East Coast, West Riding, Lancashire and Cumberland. The opening up of the last two districts was partly due to the revolutionary changes in steel manufacturing which altered the whole technique and organisation of the industry. These were the Bessemer process of steel manufacture and the Siemens Martin or open-hearth process. But the changeover from wrought iron to steel was very gradual on account of the opposition of the vested wrought iron interests. Therefore the output of steel remained small during the 'sixties and wrought iron production continued to expand, reaching its zenith in the boom which accompanied the Franco-Prussian War of 1870-71. By the beginning of the Great Depression of 1873-74 the wrought iron trade entered upon a long period of decline and the Steel Age had begun.

Britain was relatively as well equipped for the development of this new steel industry. The existence of non-phosphoric ores in Lancashire and Cumberland led to the rise of a large iron and steel industry but owing to her superiority in shipping and her coal export, Great Britain was in a position to import the non-phosphoric ores of Sweden and Spain more cheaply than other industrial countries. This dependence of the steel industry on imported supplies steadily grew until in 1913 about half of the British iron output was made from imported ores. Therefore the industry began to move from the older midland centres to coastal districts after 1860.

The suppression of the wrought iron was hastened by the discovery in 1879 of the basic process of Gilchrist and Thomas. The thirty years prior to the War saw the introduction of several other classes of steel like manganese, silicon, chromium, and nickel suited for special purposes. Electric furnaces were introduced for the production of special steel. The high-speed tool steels encouraged the mechanisation of the metal trades and so by cheapening production led to an immensely increased demand for

ordinary qualities of steel. Another tendency in the steel production during the pre-war decades had been the steady increase in the relative importance of open hearth as compared with Bessemer steel which was due to the peculiarities of home demand for steel and to technical factors and to the growth of competitive steel industries in Germany and America which enforced specialisation on Great Britain.

Causes of decline:—The “Great Depression” marked the end of Great Britain’s predominant position in the iron and steel trade. She was overtaken by Germany and the United States and from a position of supremacy in the seventies she was reduced to the third place in 1913 by their superior natural resources and by technical changes. *Firstly*, there occurred a change in the organisation and technique of production. The organisation required by the industry after the coming of steel differed from that suited to the wrought iron. “Whereas the wrought iron trade was largely a manual process and depended on the skill of experienced workers, success in steel production was bound up with the scale of output and the ability of the trained metallurgist. Moreover, in addition to the fundamental

inventions a number of detailed improvements in processes were made and of these the newer producing countries were able to take full advantage." The superior natural resources and the conveniences of adopting the industry to new technical changes and inventions enabled Germany and the U.S.A. to outstrip Great Britain. "Thus, the bye-product-recovery oven for the production of metallurgical coke came into use after 1880, just when the continental pig iron industry was expanding; and practically all the coke output of the Ruhr in 1913 was manufactured in plant of that kind." But by this time Great Britain had already "reached the limit of her expansion as a producer of iron and her coke-oven plant could not easily be remodelled. In 1913 two-thirds of her ovens were of the old type." *Secondly*, the effecting of economies to meet an ever increasing competition led to the development of coke ovens, blast furnaces and steel works in close proximity. Countries just entering the field for competition could easily organise their industries on these lines, but Great Britain was handicapped by the age of her industry and "her old plant, which in situation and construction, was more suited

to the iron than to the steel age." *Thirdly*, the gradual exhaustion of the coal supplies in Great Britain increased the cost of production in the iron and steel industry. "The conditions of the British raw material supplies also changed to the disadvantage of the iron and steel industry." The low cost of coal in the earlier period had specially favoured it, but during the period following 1880, the ore supplies in many of the older fields were giving out and the cost of coal mining was rising. The price of coal rose relatively to the general price level upto 1900 and 1904 and this tended to increase the prices of pig iron and steel; and the improvements in technique in all branches of the industry were not able to overcome the effects of the rise in the cost of fuel. On the other hand, the two rivals, Germany and America, were just beginning to work their rich and abundant raw material supplies. *Fourthly*, the mechanising of the industry also redounded to the advantage of her rivals.

This formidable rivalry of America and Germany checked the expansion of the British export trade and the tonnage of iron and steel export actually declined to a slight extent between

1880 and 1900. In 1800, the British exports in value were twice the combined exports of these two rivals and France, but 20 years later, German exports were alone only slightly less than those of Great Britain. The great expansion of the international trade after 1900 saw the rise of the British annual average exports even in ships and engineering products.

Period	Export in million tons	Value in sterling
1900—04	3,312	29 m. „
1910—13	4,747	48 m. „

Yet on account of the systematic dumping policy of Germany her export increased still more rapidly and exceeded those of Britain in value in 1912-13. American exports also rose at a greater rate than those of Britain after 1900, but their value was still substantially less in 1913. As to the composition of the trade—exports in pig iron remained large though stationary; those in finished iron declined due to its displacement by steel and railway material. On account of foreign competition, a new trade in steel bars and sections grew up and there was a great increase in the export of sheets, tinplates and tubes. The period also saw the development of imports from the basic-steel industries

of Germany, Luxemburg, and Belgium (Ingots, booms, billets, wire and sheet-bars). This import rose from an annual average of about 5,00,000 tons in 1895-99 to 1,849,000 tons in 1910-13. The continent by producing cheap basic Bessemer steel on a large scale was under-selling the British makers who were concentrating on higher grades of steel and on finishing processes.

The War and its effects:—The outbreak of the Great War in 1914 led to a very heavy demand for munitions and gave a fillip to the iron and steel industry throughout the world. The chief combatants increased their capacity while those which had been producing very little or nothing, began to manufacture iron and steel goods for themselves. Great Britain also increased her blast furnace capacity from 11 to 12 million tons and that of steel from 8 to over 12 million tons.

The close of the War led to the cessation of the boom but left a legacy of increased productive capacity. This was followed by the inevitable crash after 1920 together with financial disturbances. The impoverishment of Central Europe and the inability of the pre-war creditor nations to supply capital to the new countries on

the former scale checked the growth of the iron and steel demand. The output of steel had doubled and of pig iron had increased by $\frac{2}{3}$ in the decade prior to the War; in 1924-25 the output of pig iron was distinctly less than in 1913 and of steel was slightly greater. The chief sufferers were continental Europe and Great Britain as is evident from the fact that while American steel production made a considerable advance, the output of leading continental producers was 11% less than before the War in the case of pig iron and 7% less in that of steel. The steel output of Great Britain was equal to that of 1913 but the pig iron output had declined by $\frac{1}{3}$. Since 1924-25 the world output had greatly increased specially in the U.S.A. and Western Continental countries, but in the case of Great Britain her production had remained stationary since 1914, in both pig iron and steel. Upto 1924-25 therefore Britain had suffered in common with other European producers but since that time her pig iron trade unlike theirs had failed to recover and she had shared only to a little extent in the expansion of the European steel output. Her plant had worked at about half capacity. The insured labour force con-

tracted by 10% between 1924-30. Unemployment had been low. British iron and steel industry like her coal trade had been the principal sufferer from the excessive world capacity since 1920.

The chief causes of this relative decline can be grouped under two broad heads—(a) a deflection of world demand from those classes of materials which Great Britain was best fitted to produce to others in which her relative advantages were fewer; and (b) the high costs of production of the British industry relatively to those of her competitors.

The first point is illustrated by the fact that the steel output had increased at a much greater rate than pig iron production, so that whereas in 1913, the latter was in excess of the former, during the post-war period the position had been reversed. This change had been caused partly by the substitution of steel for wrought and cast iron and partly by the increased use of scrap left by the War in open-hearth furnaces and in foundry cupolas. A second change had been the advance of the basic process. Thus, the two marked changes in the demand had been the relative decline of iron and the advance of

basic steel and these had affected very adversely the British industry, as is evident from the fact that the production of puddled iron before the War was 12,07,000 tons, but by 1929 it had fallen to 1,58,000 tons only, owing to the displacement of wrought iron by steel. This represents a loss to Great Britain of a line in which she was previously supreme. This decline in wrought iron in turn adversely affected the output of forged iron while a similar substitution of cast iron for basic steel had reduced the demand for foundry iron. The demand for acid steel in which Great Britain excelled had declined through the depression of ship-building and railway equipment manufactures. A more important reason lies in the substitution of basic for acid steel. Great Britain had unfortunately concentrated on forged, foundry, wrought and puddled iron and on acid steel, whereas she had fewer advantages than her continental competitors for the production of cheap basic steel which had come into fashion. This is illustrated by the fact that the annual average quantity of exports from Great Britain declined from $4\frac{3}{4}$ million tons to $4\frac{1}{4}$ million tons between 1910-13 and 1926-29. In distant markets, the British

loss had been caused by the increased production in India and Japan and by the establishment of blast furnaces in countries which were formerly dependent on imports. True it is that excluding pig iron, the tonnage of exports in 1927-29 was about the same as before the War in galvanised sheets, tin plates, steel bars, pipes, tubes and railway material but she had not succeeded in winning a sufficiently large share of the increased trade in other products to balance her severe losses in iron exports. Secondly, the failure of the British industry to adjust itself to the changed conditions of demand was to be found in her costs of production which had been too high in those classes of materials for which demand had increased and in which continental countries were the most active competitors. The reasons for this relative disadvantage in costs were (1) the superiority of the continent in its ore resources suitable for the production of basic steel; (2) the financial policies of both the Government and the producers, (3) the inevitable difficulties of adjustment by an old country which had long abandoned cheaper methods.

During the War and Post-War boom of high prices, extensions and additions to the existing

plant were made from capital reserves and issue of loans which, when the fall in prices came after 1920, left many firms over-capitalised and excessively weighted with debentures and overdrafts. The restoration of gold standard in 1925 at the pre-war gold parity leading to further fall in prices affected the costs in two ways—(a) the real burden of interest charges was increased and (b) the raising of fresh capital to adopt such technical improvements as would lead to more economical production became difficult. Thus, as pointed out by the Balfour Committee, the decline of iron and steel prices had been unaccompanied by a corresponding reduction of costs in the industry as a whole. The continental countries, on the other hand, followed a very different financial policy. Although the rate of interest there had been high since the War, they reduced the weight of fixed charges by inflating their currencies, stimulated the export trade and reduced the burden of taxation both by inflation and by subsequent devaluation. The net result of all this had been that the European competitors were placed in a more favourable position financially and could be equipped with more modern plants than the British firms. (4)

The fourth cause for the high costs had been the social services like the Poor Law Relief, the burden of which had been reduced somewhat since the Derating Act of 1929 which had reduced the railway rates on fuel and on all iron and steel goods. (5) The fifth reason for this had been the reduction in hours of work in 1919 from 12 to 8 but a similar reduction had also taken place among the continental competitors. (6) A sixth and more serious cause, however, of the high costs was the rise of coal prices because the cost of fuel represents about thirty per cent of the cost of steel production.

We may, therefore, conclude that the main cause of the relative decline in the British Iron and Steel Industry lay in the fall in demand of products in which her competitive position was strongest, a fall due to the introduction of cheaper substitutes. She could have held her share of the world trade under these conditions by reorganising her industry so that it should become as efficient as her continental competitors in the production of cheap basic steel, but she was prevented from doing so by a wrong financial policy, by vested interests and by the superior natural advantages of her competitors.

This relative loss is due to her inability to reduce her costs of production of superior goods to meet continental competition. British ores cost more; readjustments within the industry could not be made in the troublous post-war period; and the British industry became overcapitalised as a result of great extensions during a period of high prices made by borrowed capital. Other factors have been high wages, and high coal prices and freights. The main cause of the relative decline in the iron and steel industry of Great Britain lies in the fall due to the introduction of cheaper substitutes; and its inability to reorganise itself to follow the continental example of huge combinations among steel manufacturers. In 1927, the British steel-makers set up an organisation for fixing minimum prices in the home market and reducing competition, and in 1930 was founded a permanent organisation, the British Steel Export Association, to control export prices. Other associations for research were also founded, and several important amalgamations were made after 1929 with a view to rationalise production.

During the depression since 1929, the production of both pig iron and steel fell very sharply

in 1930, 1931 and 1932. Pig iron output recovered remarkably in 1933 and steel recovered to the 1929 level in 1934. This was due to increase in ship-building, armaments, constructional activity and the motor industry. In 1932, a tariff of 33 $\frac{1}{3}$ % *ad valorem* was imposed on iron and steel products, thus reserving the home market for British industry. But there was no gain in exports which had continued to fall. The tariff had, however, relaxed the process of reorganisation within the industry. A new body, the British Iron and Steel Federation has been founded (in 1934) to assist in and co-ordinate sectional schemes for reorganisation but it had probably maintained prices rather than accelerated technical or structural improvements.

The iron and steel industry together with coal mining and chemical industries has been given a tremendous spurt by the present war. Ever since the aggressive policy of Hitler on the continent of Europe the armament and munitions factories have been pushed up by the Government very vigorously and the rate of their rapid advance has been accelerated very powerfully since September 1939 when the hostilities began. The aerial bombardment has not in any serious way affected the factories which are intact.

CHAPTER XIII

THE GREAT WAR AND BRITISH TRADE AND INDUSTRY

During the decade before the War, British foreign trade and industry were steadily expanding, the consuming power of the world had very greatly advanced and Great Britain maintained a firm hold on the world market despite the rise of foreign competition and protective tariffs. The British overseas investments led to an increasing amount of capital flowing towards the backward parts of the world for their economic development. This was due to the demands of the Industrial Revolution for an ever-increasing quantity of raw materials and food-stuffs for her growing industrial population. A growingly energetic search for new markets as well as for sources of supply of primary products was made by Great Britain. All these led to the development of economic imperialism. Between 1899-1913, the rate of economic advance was much greater in the U.S.A. than in Great Britain and in the meantime money wage-rates had risen by 43% in the U.S.A. and by only about 10% in

U.K. whereas the gross Schedule D. Assessments* to British Income Tax rose from £432 m. £670 m. or by 55%. It shows clearly that the distribution of the national income was altered to the substantial advantages of profits at the expense of wages. To some extent therefore the hold of Great Britain on the world market was maintained by a failure to improve the standard of living at home. Hence, the rise of socialism and economic discontent, the growth of the Labour Party as a political force, and in the years just before the War the outbreak of strikes and unrest and the prevalence of new social theories as a protest against the failures of politics to give the labourers what they wanted. Industrial unrest was the answer to the failure of wages to rise. Syndicalism, industrial unionism and gild-Socialism were the portents in the sky of pre-war capitalist Great Britain.

During the years of the War, the entire economic system was radically altered, the available power of men and machines was directed primarily not to the maintenance of a great export trade or even to supplying more than the bare needs of the civilian population but to meeting

*G. D. H. Cole.

the necessities of war both for the domestic and allied forces. Capital and labour were diverted from normal productive channels into the manufacture of munitions of war; banking and credit, insurance and finance, trade and transport were all regulated with a view to the exigencies of the war. Export trade was hampered not only by diversion of labourers and capital but also by shortage of shipping space either to bring in raw materials or to send out goods overseas specially after submarine warfare. Countries dependent on Great Britain for their supplies of manufactured goods found their supplies cut off or seriously reduced, and were compelled to develop their own manufactures. The consequences were a great dislocation of the normal operations of trade, a drastic re-distribution of capital and labour among industries and services, and the increase in the regulation of trade and production by the State. Every important article of food and drink etc. was rationed by the Government. Prices rose sharply at very different rates in different countries and for different classes of goods. England was driven off the gold standard and the widely fluctuating rates of exchange added to the complications of trade. Economic

freedom by which the English men had sworn so far was seriously interfered with. Taxes and Government loans rose rather sharply and further inflated the prices. Production and capital expenditure were governed not by ordinary economic considerations and therefore the productive system was thrown badly out of gear. The cessation of the War brought in its train a series of entirely new and disturbing complications like the re-drawing of political frontiers, the redistribution of colonial empires among the victors, the seizure of German mercantile marine and last, but not the least in importance, the fateful War debts and Reparations. The old economic units of production and trade were broken up, the old balance of international payments radically disturbed, and a great impetus was given to the forces of economic nationalism.

The War bred a world prosperity for the time being on account of high prices and scarcity and amid the briskness of demand the widespread inefficiency of production went unnoticed. With a swing of the pendulum in 1921 the world was plunged into a chaos of deflation and unemployment out of which it slowly emerged with the stabilisation of currencies and price adjustments

till 1925. Even the neutrals who had reaped windfall profits did not escape the blighting effects of the post-war monetary muddle and its concomitants. In 1913 the value of British exports stood at £525 m. but in 1918 in spite of 129% rise in the wholesale prices they were valued at only £501 m.; but even these figures underestimate the decline in quantities because England was charging 172% more on the average for its cotton exports and 153% for its woollens. The prices of coal and steel exports under government regulation had risen only by 117% and 107% respectively.* The rise in prices due to short supplies was further augmented by the imposition of Excess Profits Duties, Sur-taxes and Sur-charges. Thus in 1913 cotton exports were 7 billion yds.; and in 1918 only 3.7 billion yds.; coal fell from 73 m. tons to 32 m. tons; woollens had declined from 108 m. yds. to 98 m. yds.; and iron and steel from 5 m. tons to 1.6 m. tons. Exports of ships ceased and the value of exported machinery fell from £37 m. to £16 m. At 1913 prices measured by the wholesale price-level the total exports of 1918 were worth only £219 m.—a fall of 58 per cent.

*G. D. H. Cole.

The War dealt a more severe blow to the foreign trade and production of Germany, France, and Austria etc., and the neutrals like U.S.A. and Japan immensely increased the value of their exports. The post-war boom of 1919-20 led to a further price inflation under which the visible value of overseas trade showed a rapid increase. Index numbers of wholesale prices in Britain rose from 229 in 1918 to 254 in 1919 and to 315 and later to 320 in 1920, while the cost of living index number rose to 203 (1918) to 215 (1919) and 249 and later 276 in 1920. The British exports rose from £500 m. in 1918 to £800 m. in 1919 and to £1334 m. in 1920, but the quantity of goods exported remained far below the pre-war level. Less than $\frac{2}{3}$ rd of the cotton goods was sold for more than three times the total price and less than $\frac{1}{4}$ more woollens than in 1913 for nearly five times the total price.* In 1921 the boom was followed by a depression, when prices—first wholesale and then retail—began to fall as rapidly as they had risen during the boom. Trade values declined, wages were reduced, and led to an industrial strife of unprecedented magnitude because of the retail prices lagging much behind the

* *Ibid.*

wholesale prices in their fall. This fall in prices was the outcome of the monetary deflation caused by the attempts of the gold-using countries to return to an effective gold standard.

During the boom the price-level had risen a good deal more in the U.K. than in the U.S.A. and it remained higher till 1924. To meet the situation the Bank Rate was raised, credit restricted, and deflation of currency resorted to. A number of people who had made large paper fortunes during the boom suffered very heavy losses; the incomes and taxable capacities dwindled and the value of British exports fell from £1334m. in 1920 to £703m. in 1921. The great dependence of Great Britain on her external trade and her position as the world's financial centre aggravated the situation. A relative decline in her position as an exporter of manufactured goods set in. It is evident from the following figures: in 1918 her foreign trade included about 15.24% of the world's retained imports and 13.11% of her domestic exports and on the average of 1927-29 they were 15.5% and 10.94% respectively.*

From 1925-29 British trade and industry enjoyed a period of prosperity. It was a period of

* *Ibid.*

recovery and reconstruction. With the restoration of the gold standard in 1925 and the normal functioning of the economic life of the country, British industry was allowed a breathing space and time to reorganise and to rationalise its methods of production. The movement towards horizontal and vertical combinations got an impetus after the War and this merging and amalgamation of competing independent individual units enabled them to fight successfully the growing competition from their rivals.

A great stimulus was further given to the development of British exporting industries and export trade by the modification of traditional free trade policy from 1919 onwards. From 1925 to 1931 they enjoyed a boom and made a good deal of the losses which they had sustained in the post-war period. But since 1931, when it was found that on account of the manipulation of gold supplies by France and the U.S.A. specially, Great Britain was not able to compete in the foreign markets, she went off the gold standard and the justification of this policy is found in the recent development of her foreign trade, the wiping out of its budgetary deficits, and a reduction in the figures of unemployment. The

Ottawa agreement of 1932 aiming at the consolidation of inter-imperial trade had been another important factor in the revival of British industries and trade in the present decade.

“Pre-war Britain was essentially adapted to supply the world in particular with coal, textile goods, and other manufactured articles. But since the War, she has had to face the development of the cotton industry in the East; substitution in a substantial degree of oil and hydro-electric power for coal; generally less favourable terms on which the agricultural countries of the world have been able to sell their products affecting not only the demand for our manufactures but also bringing a reduction in domestic agricultural prices; the disorganisation of trade with China and India and many other countries resulting from political and other forms of disturbances and to a large extent from the fall in the value of silver; the currency disorders in various European countries followed at a later date in some cases by stabilisation of the currencies on a basis which gave a substantial temporary stimulus to their export trades; the growth of tariffs and alterations in tariff policies; and a great development of nationalism.” (MacMillan Report on Finance and Industry 1931).

The present war and its economic effects: The present titanic and mechanised warfare between Hitlerite Germany and the Allied powers since 3rd September, 1939, has affected the British industry and trade very profoundly. "The outbreak of the hostilities changed the British economy from a peace to a war-time footing and the entire economic resources of the British Empire had been mobilised for the successful prosecution of the war."* With a national conscription a vast body of labourers has been withdrawn from the factories and farms and their place has been taken up by females and enemy captives and internees to some extent. Both capital and labour have been diverted from the normal channels of peace-time industry and trade, supplying the needs of civil population and exporting huge quantities to the overseas markets, to the production of armaments and munitions. To augment the supplies of war materials, the production and supplies of non-military goods have been substantially cut down and exports have declined. Exports from U.K. to India alone declined from 46.49 lakh rupees in 1938-39 to 41.61 lakh rupees in 1939-40 and to 35.97 in

*Report of the Reserve Bank of India 1939-40.

1940-41. Only essential supplies of war materials have been allowed export under sanction and licenses to the Allies. Then the shortage of shipping accommodation and requisitioning of all available tonnage for the purposes of the war, the bombardment of the British shipyards by the enemy aircrafts and the ruthless sinking and torpedoing of merchant ships by magnetic mines and submarines, raiders, U-boats, E-boats, etc., have tended to act in the same direction of reduction of exports. Last year sinkings outstripped replacements. Upto February, 1940, the sinkings averaged 40,000 tons a week and in June, 1940, they passed 100,000 tons. Then as a result of convoy system the average was reduced to 25,000 tons a week in August but in September again they averaged 100,000 tons. Although through mine-sweepers, destroyers and cruisers for convoying and patrolling and through long-range bombers and corvettes the menace has since then been controlled to a very great extent this year, yet the casualties and fatalities among merchantships of the world are many. According to the figures of the British Admiralty the total shipping lost for the whole period of the war upto March 1941 was 5,590,206 tons of

which British losses accounted for 825 ships and 3,517,452 tons.

During the first five months of the year 1939-40, under the stimulus of the needs of national defence for which £630 m. had been provided in the budget estimates of that year, industry continued to expand rapidly. Just before the beginning of the hostilities the Bank of England Rate was increased from 2 to 4 p.c. and the minimum prices of gilt-edged securities were fixed to prevent wild speculations. To stabilise exchanges after the outbreak of hostilities, the pound sterling was devalued and pegged to the dollar and a scheme of exchange control was instituted. Prices of food-stuffs were fixed and stocks of certain essential goods were taken over by the Government. To secure utmost shipping space and foreign exchange for the armaments and essential raw materials a rationing scheme was introduced. With less dislocation of economic conditions and at a much earlier stage of the war than in 1914, various emergency controls over industry and trade necessary for the prosecution of the war were instituted. To mobilise and conserve their economic resources Britain and France agreed to a complete economic collaboration and co-ordinated action.

During 1940-41 as the war extended to new zones and hostilities intensified stricter control of wages, prices and profits was established, taxes were enhanced steeply and private incomes depressed a more stringent regulation of production and rationing of consumption, and direct and indirect control of savings and investments were instituted. Foreign exchange controls and regulations were made more rigid and they caused a revolutionary change in the character and direction of British trade. Heavy restrictions of credit for non-military purposes paralysed the peace-time industries.

The average daily expenditure on war has increased from £4.7 m. in the first month of the war to £7 m. in March 1940 and later it mounted upto the stupendous and staggering, nay astronomical, figure of £14 m. in March 1941. According to the statistics of the British Treasury the ordinary revenue during the first twenty months of the war amounted to £2,264 m. as against a total expenditure of £5,703 m. and war expenditure of £5,079 m. Higher taxes on income, a 100 p. c. Excess Profits Tax, a purchase tax and other indirect taxes were resorted to to finance the war industries, etc., and the gap

of £3,439 m. between revenue and expenditure was made up by loans and other savings upto £1,712 m. and by floating debt upto £1,727 m. To have a steady flow of Treasury Bills, there was introduced in July 1940 a system of voluntary loans from banks in Treasury deposits of six months currency at $1\frac{1}{8}$ p.c. and medium-dated loans were raised at between 2 to 3 per cent. The stock exchange and the gilt-edged market remained stable. To mobilise the wealth and labour of the country for defence to the fullest possible extent a series of comprehensive legislation was passed on 22nd May, 1940. In December 1940 a new $2\frac{1}{2}\%$ national war bonds and 3% savings bonds were issued at par with a minimum subscription of £100 and £25 only for small investors. In spite of earnest efforts the exports declined from £451 m. in the quinquennium of 1934-38 to £439 m. in 1939 and to £413 m. in 1940. The imports on the other hand rose in the same period from £840 m. to £857 m. to £1,100 m. The index number of wholesale prices on the base of 1930 rose from 98 in August 1939 to 129 in March 1940 and to 151 in March 1941; whereas the cost of living index number on the base of 1914 rose in the same period from

155 in August 1939 to 179 in March 1940 and 197 in March 1941.

Since the current financial year a number of very far-reaching changes have been introduced. The financing of the most expensive war industry especially of bombers and tanks has led to heavy taxation. To prevent profiteering not only prices have been controlled and regulated but industry has also been saddled with the Excess Profits Tax of 100 p.c. to prevent industrialists from getting rich during a national emergency of unparalleled magnitude in which everybody is making sacrifices. The industry has, however, been promised a return of 20% of the tax at the end of the war to assist reconstruction. Extractive industries producing metals and oil have been granted excess profits concessions. To avoid inflation and its aftermaths the principle of price stabilisation has been extended to wages so that they would remain about the present level. With the same end in view; *i.e.*, cutting down purchasing power during the war to avoid the ever-increasing dangers of inflation, taxes on incomes have been increased to get an extra £250 m. in a full year. The minimum taxable limit has been reduced from £120 to

110 per year to rope in 2,000,000 more taxpayers. Basically the income-tax rate has been raised by 1 and 6 pence to 10 shillings in the pound with a reduction of abatements at the lower end of the scale and with the tightening of taxation at the other (19s. 6d. in the £). Thus, income-tax and sur-tax now absorb 97.5% of the highest incomes, while a single man earning 45s. a week, who was tax free last year, will pay now 2s. weekly; but the whole of this payment will be treated as a credit to the individual in the post office savings banks. Similarly a married man with two children and an annual income of £350 will pay £24-7-6, and out of £19 increase over last year's tax, he will get after the war a sum of £17-6-8; whereas, if the income were £1,000 a year, he will pay £90 more than last year out of which a little over £48 will be treated as savings bank credit. This principle of "compulsory savings" advocated by J. M. Keynes has also been applied to the Excess Profits Tax wherein 20% is to be refunded to the industry at the end of the war.

A new policy of industrial consolidation affecting about 50 industries since March 1941 has been introduced whereby Government has

assumed control on national production, and ordered part time work to the factories catering to the needs of the civil population. "In consequence of the need for severe reduction of civil consumption and release of labour materials and factory space for more essential purposes, many factories would necessarily work only part time." The new policy has concentrated production in a few factories, working full time and capable of producing the full quota of Government orders, the greatest practicable export trade and the minimum needs of the population, and of preserving the goodwill of other factories which have been closed. The policy is co-ordinated by the Export Council and legislation is imposed in the absence of voluntary co-operation of the firms concerned. No financial amalgamations have been envisaged and the object is to ensure that redundant firms should be compensated by those who are to work at full capacity. For this purpose the Board of Trade is to keep a register of firms and factories affected, in order to ensure that they regain the labour they lost in the most orderly way possible at the end of the war. Clocks were advanced as usual by one hour last spring but normal reversion in autumn was not

carried out and clocks remained one hour ahead of Greenwich time. To have another hour of day-light this summer the clocks were advanced by another hour from May to August 9. The Ministry of War Transport came to an agreement with the British railway companies an announcement of which was made on 28th August, 1941. As a result of this the Government has taken complete control of all railways and the London Passenger Transport Board for the war period and one year thereafter at an annual compensation of 43 m. sterling for increased war costs to the railways. This sum excludes payments for interest and redemption charges. The object of this State control of railways is to minimise the impact of increased transport charges on the cost of living.

Tempted by higher wages in munitions factories and works thousands of miners left the coal mines. They were recently registered compulsorily and induced to return voluntarily to their pit, but very few have done so. There is a shortage of labour in the coal trade and to meet a possible coal shortage in winter the Government has taken compulsory powers since August 28 to send former miners back to the pits.

Moreover to secure an adequate supply of less expensive clothing for workers a nationwide scheme has been introduced since that date as also a scheme for the reduction of the petrol ration for private motor cars by one and a half from October 1, 1941. To meet the anticipated unprecedented demand for consumable goods from all over the world after the war plans have already been elaborated.

CHAPTER XIV

CO-OPERATION*

The co-operative movement is essentially a corrective of the inequalities inherent in the competitive organisation of industry and trade. It aims through association, mutual help and an ethical education to bring the essentials of material prosperity within the reach of those who are too poor and isolated to achieve it themselves. In the words of Dr. C. R. Fay, a leading authority on co-operation, "Co-operation is the response of the worker, be he town or country worker, to the pressure of capitalism. It is a union of persons and not of capital, and therefore, alike in industry and agriculture the surplus of co-operative enterprise where the co-operation is genuine, is returned to persons in proportion to the personal use which they make of co-operation....Co-operation and education have always gone hand in hand. It associates economic activities with social morality, but it is never mere 'uplift'." It aims at the elimination of the middlemen from production and distribution of wealth.

*Based on Co-operation At Home and Abroad and Year Book of Agri. Co-operation by C. R. Fay.

There are two main wings of the co-operative movement: *the industrial and the agricultural*. Industrial co-operation in England comprises the consumers' co-operation and labour co-partnership, while agricultural co-operation comprises Supply societies, Marketing societies, Credit societies, and Miscellaneous societies serving the cause of agricultural production, distribution and consumption. The first form of this co-operation is urban and is concerned mainly with the industrial workers; the second is rural, and is concerned with the countryside producer and consumer.

Dr. C. R. Fay has traced the origin of the movement to 1760. Robert Owen, the father of co-operation in England, and the Christian socialists formulated a crude theory of distributive co-operation and showed that the working classes could become their own distributors. Co-operation, therefore, began in England as essentially a working class movement and England is even today the classic home of Consumers' Co-operation. Hundreds of Co-operative societies, partly productive and partly consumers' societies, had come into existence only to fail and among them was the first Rochdale

society. But the real history of co-operation in England began with the establishment of the Rochdale Pioneers in 1844. In 1848 J. S. Mill had prophesied that the wage system would be replaced by a producers' co-operative system in which the labourers would be their own capitalists and that in this way the iniquities of the capitalistic system would be removed. He, therefore, regarded co-operation only in the light of co-partnership. In fact neither he nor the Christian Socialists regarded consumers' co-operation as an important part of the movement. The co-operative trading associations which the workers had begun to form in the early 1830's were not favoured by Owen. However, the prophesy of Mill has been falsified and distributive or consumers' co-operation has gone from strength to strength. Productive co-operation has failed on account of various reasons into the details of which it is not necessary to go here.

Consumers' Co-operation:—The Co-operative Stores, therefore, was the first form of co-operation to develop in England. According to Dr. Fay the consumers' movement of Great Britain is the child, perhaps the fairest child of the industrial revolution, and the agricultural movements.

of Denmark, Canada and many other lands are a direct response to the industrialism of Great Britain. The movement is centred in England in small towns and the suburban areas of industrial towns; it has shown a disinclination to grow in the big capitals and sea-faring towns. In 1795 the Hull Anti-Mill Society was formed to avoid exorbitant charges by millowners. Similar conditions led to the formation of the Hull Subscription Mill in 1801 and the Devonport Union Mill in 1817. Between 1820 and 1833 when the trade union movement was very brisk there were 400 societies in existence and they supplied the requirements of the working-men by purchasing wholesale genuine articles of food and clothing. In a journal "Co-operator" issued from Brighton about the same period the policy which is embodied in the store movement of today was sketched. In addition to the provision of good and cheap commodities, surplus capital of a store is devoted to the manufacture of variety of commodities for itself, it employs its own members, and the profit is devoted to the creation of reserve and further funds. Between 1831 and 1834 a series of congresses was held and a raging and tearing propaganda through the

platform, the press and the pulpit was carried on for the establishment of such stores.

It was, however, the second quarter of the 19th century which witnessed the rise of consumers' co-operation on a firm footing. The movement began, as said above in 1844, with the establishment of the Rochdale Store (not the oldest among existing societies) in Toad Lane. The pioneers were weavers who were suffering great hardships in those days of transition and therefore realised the virtue of self-help and organisation. They made bread in their own bakery, built houses for their members, and recreation rooms for the society. *The cardinal feature of the Rochdale plan was, as it is even today, sale at market price with cash payments and distribution of profits in proportion to purchases.* This became universal in all the stores that followed. Only legal disability hampered a rapid growth and this too was removed by 1862. In 1846 "Friendly Societies" were recognised; in 1852 an Act called the "Magna Charta" of Co-operation allowed the stores to sell to non-members, and made them a legal entity capable of suing fraudulent officials; and in 1862 the Industrial and Provident Societies Act was passed to

protect the funds of the stores and the workshops, and the principle of limited liability was applied to co-operative societies. This enabled the Wholesale Societies to be formed on a co-operative basis. It was in fact only after the establishment of the Co-operative Wholesale Societies in 1863 in England, and in 1868 in Scotland that the movement assumed a national character. In 1867 the first Co-operative Congress was held and the registered societies were allowed to invest in other societies to any amount. In this decade in the words of Dr. Fay "the store movement spread almost like wild-fire through the mining districts" and gave a fatal blow to the truck system which with its petty debts held the workers in bondage. *"The co-operative store put the working class of England not only on a cash basis but on a cash plus saving basis at one and the same time. It cleverly converted the apparatus of debt into a social asset by replacing the trade man's score, which registered debt, into the society's book, and members tally, which registered dividend."* Then the movement obtained a great momentum on account of a favourable public opinion. A few enquiries into the adulteration of food, drinks and drugs in 1855-56 had revealed gross abuses. But on

account of the predominance of the free trade idea the importance of the sound quality of food articles supplied through the co-operative stores was not fully realised. However, the movement had extended its organisation to almost all industrial districts. Since 1873 the Co-operative Union, which is the organising authority for the stores, has directed the movement. Besides the stores, the Union includes also workers' societies which have their separate Labour Co-partnership Association also. The Industrial and Provident Societies Act of 1893 regulates all the societies. The writings of the Webbs in 1890-92 did much to popularise the movement and organise it on more sound lines.

Since 1900 there has been a general tendency towards amalgamation, hence, the number of stores is stationary or declining but that of members is steadily increasing. *The movement has observed strict neutrality in religion and politics. Retail production is the most distinguishing feature of the movement.* Bread, confectionery, corn milling, tailoring, and the manufacture of boots and shoes are some of the important lines of the retail productivity. About six out of eleven million families of Great Britain do some part

of their domestic purchasing through a co-operative store or about 20% of the population is connected with stores.*

The progress of the stores has led to reforms with a view to a fuller realisation of the co-operative ideals. Since 1905 an Anti-Credit Committee has been discouraging credit trading; the overlapping by adjacent societies is being solved by amalgamations which explains the decrease in the number of the stores with large increases in membership, capital and trade. Before the outbreak of the War the movement had a network of retail stores and industrial co-operative societies throughout the country, and yet it was only one third of its present size. During the War and afterwards the growth was very rapid. It was of the greatest national value during the War supplying food, clothes, tobacco, soap, military furniture and Red Cross Hospitals with their requirements. £8 millions were invested in government securities. *The movement resisted price-raising and restrained hoarding and excessive consumption.* In 1917 1/4 of the civil population was registered with it for rations of sugar but the membership grew

*C. R. Fay.

beyond its capacity to supply. The boom in prices during the post-war period was followed by an inevitable crash and the C.W.S. alone suffered a loss of £5 m., but through rigorous economy and reserves it was able to withstand the shock well. The General Strike of 1926 imposed a heavy financial burden; members' indebtedness increased by £6,00,000 and members withdrew 2½ m. £ and some societies were on the breaking point. On the emergence of normalcy, however, the societies' debts were the first to be repaid.

Since 1913 important advances have been made in new fields. Through various agencies *important educational work has been organised and executed.* Since 1914 the "Co-operative Educator," a quarterly magazine, has been published to scout for the movement. For the arbitration of disputes National and District Conciliation Boards have been established; since 1916 house building schemes have been planned and executed, and since 1917 a Co-operative Party has been formed which runs candidates for parliamentary elections in agreement with the Labour Party. Since 1883 there is a Women's Guild under the ægis of the store movement.

It had 666 branches in 1917-18. It has a variety of programme of encouraging trade union, sick nursing, school clinics, maternity benefit, child labour, education and elevation of women's status. It rendered very valuable service during the last War. In bigger cities through their central and departmental stores, their advertising and social and political activities the societies are making headway. In those districts also, where trade unions are few, the movement is gaining ground and the retail and wholesale societies have attracted members of a new class in suburban and residential resorts on account of their excellent services and goods. The two wholesales have now their agricultural societies as well. In 1918 they had 116 societies for farming under them and thus established relation with agriculture and agricultural co-operation. In 1931 there were 1,266 Retail Distributive Societies with a membership of over 6½ millions and 137 Productive Societies with a membership of about 50,000 and the combined capital of both was in excess of £150,000,000. Prior to 1933 only the properties of the stores were liable to income-tax but since the Finance Act of that year *all the stores are required to pay*

income-tax like trading companies on investment incomes and trade surpluses. Of course there is no tax on dividends paid to the members.

For all its progress, however, the movement has only a small share of the country's retail trade. This is due to increasing efficiency of private trade, relation of the movement to demand and the dividend policy. Moreover, *the movement is not rural, it is mostly confined to the industrial workers in the towns. Further the productive and retail societies are not self-sufficing and have to supplement their resources by dealing in goods supplied by competitive concerns. The movement has thus made only a small beginning with agriculture and the original idea of establishing co-operative farm colonies still remains a dream.*

*The Co-operative Wholesale Societies:—*The wholesale societies are the crowning point of the store movement on its commercial side. Originally the C.W.S. was formed as a wholesale agency for the good of the consumers to supply provisions and stores but a few years later they comprised productive, housing, banking, and insurance departments, and even purchased tea estates in Ceylon, and farm lands in England and Canada. They are thus not only distributors, but producers, bankers

and insurers supplying a community of millicers with the goods and products of their own factories, estates and depots at home and abroad. There are thirty-two paid directors who are elected by the federal members. They distribute their profits based on difference between manufacturers' or importers' and wholesale prices to the societies in proportion to their custom. They are not only wholesale merchants and industrial and agricultural producers of soap, cocoa, tea, tobacco, and creamery articles but also bankers and insurers for themselves and the stores. They are landowners owning tea estates in Ceylon and South India and elevators in Canada. Since 1876 it had been its own shipper for North Sea traffic but now it has ceased to do this. In 1905 the production department produced £5½ m. worth of goods and net profit was £168,000; in 1906 the Trade of the English C.W.S. was £22,510,035 and profit was £410,680 and dividend was 4d. per £. They are considerable suppliers of agricultural requirements as well as purchasers of farmers' societies. The membership of the wholesale societies increased from 1,139 in 1908 to 1,192 in 1917, and now 9/10 of the stores are members of the society and hold

shares in it. Between 1913 and 1935 the wholesale trade increased from £30 m. to £117 m. and wholesale production increased from £11 m. to £40 m. and the number of employees of all sorts in both retail and wholesale increased from 131,000 to 301,000.

To establish liaison with agricultural co-operation the C.W.S. maintains a separate *Agricultural Department* since 1915 and carries on a considerable trade in milk, bacon, pigs, and agricultural supply. In 1918, as we saw, there were 118 societies for farming which were members of the C.W.S. It purchases grain, potatoes, eggs, cheese and other commodities from farmers' societies. Through its Finance Committee it manages the C.W.S. Bank which plays a very valuable part in financing the member societies not only within the country but also its depots in foreign countries. The total capital of both wholesale and retail societies in 1935 was £230 m. of which 41% was used in trade and 59% was invested. *The British Co-operative Wholesale Society controls at least 1/6 of the total tea trade of Great Britain from its plantations in Ceylon and South India (Calicut).* In Calicut it does considerable import business as well. There

are depots in Denmark, in New York and Canada (wheat farms and 16 elevators) in Newzealand and Australia.

Outside the workmen's stores there are several big co-operative societies of Government servants in the army, navy and civil service. However, they do not form an integral part of the co-operative movement because they lack the co-operative essential of dividend in proportion to purchases.

Producers' Co-operation or Workers' Societies:—
The co-operative trading associations of the early 40's failed by 1854 on account of lack of initiative, indiscipline among the workers, and lack of organisation and contact with the consumers' stores. Between 1854 and 1880 hundreds of productive societies came into existence, but most of them failed shortly. Moreover most of them were not co-operative associations of worker-producers at all. In 1883 only 15 genuine societies survived. The co-operative stores and especially the English W.S. abandoned the principle of profit-sharing with their employees at this very time. In 1884 a Labour Association for the promotion of co-operative production on a co-partnership basis was started

which in 1902 became the Labour Co-partnership Association. A journal called "the Labour Co-partnership" was started in 1895 to educate public opinion in its favour. The L.C.A. is the organising authority. Membership is open to private sympathisers and co-operative societies. However, it covers a wider field than workers' co-operation and recognises among its followers firms with profit-sharing schemes and even companies if they have workers' representatives on their management. On the other hand, it does not admit societies which are nominally co-operative. The Association is in fact very elastic and covers even agricultural societies, consumers' association, and private firms which conform to its principle of the workers sharing in the profits in addition to standard wages and in the management.

In 1893 there were 77 labour co-partnerships and in 1906 they were 132; of which 123 were in England and 7 in Scotland. The manufacturing societies consist either of individuals or of individuals and co-operative store societies and cover a variety of fields like building, textiles, books, leather, agriculture, printing and metal trades. According to Dr. Fay the organised

co-partnership movement embraces three groups of industry : (a) clothing in various forms, (b) boots and shoes, and (c) printing. There are 44 co-partnership societies under the Co-operative Productive Federation. In 1935 it was estimated that they produced $\frac{1}{3}$ of the output of co-operative clothing in England, $\frac{1}{4}$ of co-operative footwear, and $\frac{1}{4}$ of co-operative printing matter. In flour-milling and building they do not flourish. The number of societies has been falling constantly since 1906 : it was 90 in 1908, 76 in 1913 and 59 in 1918 and in 1935 only 44. But the total capital, trade and profit and dividend on wages have all been increasing.

Besides labour co-partnerships schemes of *profit-sharing* on the initiative of employers have met with very great success. Experiments in profit-sharing continue to increase in hundreds of joint stock companies and a great change of feeling as to the status and welfare of the labourer in industry has led to an increasing share being given to him in management through a Works Council or Co-partnership Committee. This growing spirit of co-operation between the employer and the employee and an enlightened view of the employer as to the status and social

and economic welfare of the worker under him is full of industrial significance for the future. *The chief material advantages to the worker from the industrial co-operative societies are that in addition to his wages he gets about 1/3 of the net profit according to his wages, an extra payment for his work as a member of the Committee, a 5% interest on his capital holding and a share in the benefits of provident and educational fund. On the social side the main advantages are (a) it has introduced the workers to self-government; (b) has familiarised the working classes with cash payments; (c) has encouraged thrift and opened up fields for working class investments; (d) and has improved the intelligence and the character of the workers through education.*

The Wholesale Societies of both England and Scotland have not given help to these societies; they rather compete with them in certain trades; but the Productive Federation finances and helps them in sales to the retail stores through the Joint Invoice System.

Agricultural Co-operation: The peculiar circumstances of English agriculture prevented a rapid growth of agricultural co-operation in England. There is no peasantry in England; the landlord, the tenant, farmer and the labourer

constitute the English agricultural organisation. The English farmer was big enough to undertake the purchase and sale of produce; the landlord under the English system of land tenure provided some of the capital for which co-operative credit banks had been developed on the Continent and the English farmer brought and bred up in the individualistic atmosphere was averse to the idea of association. Even after the Great Depression, the Agricultural Commissions of 1882 and 1894 did not recommend co-operative societies for the resuscitation of agriculture.

The agricultural co-operative movement began in England with the establishment of E.O. Greening's Agriculture and Horticultural Association of 1868 formed to combat high prices and adulteration of feeds and fertilisers which was very common before the passing of the Fertilisers and Feeding Stuffs Act in 1893. This association terminated during the War. It was followed by a group of similar societies some of which still exist. First attempts at group marketing failed because they disregarded the co-operative farm. The movement continued fitfully and all thought was given to the prob-

blems of the Great Depression and its evil consequences. In 1894, however, the establishment of the Irish Agricultural Organisation Society under the influence of Horace Plunkett created general interest and brought the question of agricultural organisation to the forefront. There were a few societies in existence before 1900 when the British Agricultural Organisation Society was set up. It was merged in 1901 with the National Agricultural Union and together formed the Agricultural Organisation Society. In 1905 a separate Agricultural Organisation Society was formed for Scotland. Between 1900 and 1907 the number of societies increased from 12 to 142, membership increased from 517 to 9000, and trade from £9,467 to £350,000. Out of these a hundred were supply societies, 13 dairies, and 11 credit banks. In 1905 a Wholesale Supply Agency known as the Agricultural Co-operation Federation was formed. Up to 1908 there were co-operative associations in more than 40 countries. The movement received no State help as it did in Ireland.

With the Small Holdings Act of 1908, however, it is being utilised by the Government for the development of small holdings. The De-

partmental Committee on Small Holdings in 1906 recommended the promotion of all forms of agricultural co-operation and specially the formation of agricultural credit societies by State loans on the approved security of a central co-operative agricultural credit association. It further recommended an annual grant to the A.O.S. by the Board of Agriculture and Fisheries. Accordingly the Small Holdings and Allotments Acts provided that a county council might promote the formation of, and assist, the co-operative societies and credit banks or societies having for their object, or one of their objects, the furtherance of provision and successful cultivation of small holdings or allotments. Where the Board of Agriculture themselves provide small holdings under the Act they may exercise the powers of a county council in respect of any co-operative society or credit bank. A bill for the provision of co-operative credit was read in the House of Lords in 1908. The Government thus recognised the need of supplementing by co-operation any scheme of small scale farming. "The peasant farmer is in a singularly weak position to adjust supply to demand and hence his price is determined by the supply." The

Small Holdings and Allotment Associations, therefore, which have been formed to bring about reform in land tenure, are the centres for the ordinary co-operative work of credit supply and production which has been developing among the small farmers. The desire to eliminate the middleman who eats up the profits is growing stronger and, therefore, in England the agricultural co-operative movement has started with co-operative supply and sale. It is expected that within the next fifty years the supply society will become the normal channel of purchase for many big farmers and for practically all smaller ones, that sale societies especially in milk and garden products will give even a greater material advantage to the farmer and that under the stimulus of suitable legislation the small farmer will recover his lost position under the guidance of the A.C.S.

In spite of the consumers' stores the agricultural co-operatives received little impetus from the towns because the consumers in a regime of free trade resented attempts at improvement of producers' prices. However, the Co-operative Union was associated with the A.C.S. for a few years and the C.W.S. later on played a very

useful part in bringing succour to the agricultural societies in the post-war depression. Ten years before the A.C.S. had developed a number of strong co-operative supply societies. The War with its regulation and rationing led to a rapid growth of agricultural co-operative trade, and to complete the commercial side of the movement, an Agricultural Wholesale Society was established. The post-war slump, however, inflicted very heavy losses; a number of small societies succumbed, some lost their capital and others suspended bonus and interest payments. The A.W.S. tried to cover losses by increasing the shareholding of its member societies. Still Government aid was sought to protect such societies as supported it. The collapse of the A.W.S. was a great shock to the movement and its failure led to the withdrawal of the Government grant in 1924 which it had received since 1908 for small holdings and allotment work. Secondly, the Welsh A.C.S. was separated from it in 1922. English agriculture was, therefore, left without an organising authority with a trend towards co-operation. To some extent this gap was bridged by the Horace Plunkett Foundation in 1925 in London. The Ministry

of Agriculture thought that co-operation must be a farmers' movement, a movement by farmers for farmers, and must grow from within; and that the National Farmers' Union must take the responsibility of organising the co-operative movement in agriculture. But this association on account of its political and other preoccupations was unfit for it. Thus, the movement was left without proper guidance for a long and critical period.

By 1928 normal conditions prevailed and the movement became stable. *The English agricultural co-operative movement, therefore, is a small marketing movement concerned with the lesser products of the farms and a considerable and steadily increasing co-operative trade in agricultural requirements.* In 1936-37 the total trade of the societies amounted to £11,600,000 of which £8,400,000 was concerning 99 societies selling agricultural requirements only. 77% of this trade was in the hands of large (23) societies. Most of the supply societies are now members of the C.W.S. and buy 1/3 of their supplies from it. Out of the 111 marketing societies with a turnover of £3,100,000 those selling eggs, fruits, and wool are progressing. About 8% of English eggs are

now co-operatively marketed and the best of the National Mark Egg Packing Stations are co-operative. The Hopgrowers' Co-operative with 90% of the growers as members being unable to hold prices has been reconstituted into the Hop Marketing Board with compulsory powers. A few big societies are livestock or bacon societies. Only the milk selling societies are losing ground on account of the bargaining functions being taken over by the Milk Marketing Board. The Co-operation Committee of the National Farmers' Union is taking more lively interest and there is a renewed contact through the association of managers of the societies. The retail societies have numerous informal contacts with local producers. There are 80 supply societies in Wales. On the whole, *the Marketing societies have shown a downward trend in recent years on account of the Marketing Boards and the rise in prices which have decreased the number of dairies, although every group except bacon and the Women's Institute has fewer societies.* During 1938 the number of societies decreased by 10%, members by about 1%, share capital by 13½%, reserves by 28%, loans by 9% but overdrafts increased by 17% over the last year.

Supply Societies

Year	Numbers	Members	Turnover
1912	163	18,149	£1,334,459
1918	237	35,993	£4,674,210

These supply societies are concerned with manure, bonemeal, machinery and complete dairies, slaughter and agency business.

Dairy Societies

1912	26	2456	£406,159
1918	39	5223	£1,467,695

Since 1916 retail marketing has been undertaken and a Federation has been formed of societies affiliated to the A.C.S.

Egg and Poultry Societies

1912	38	2,329	£28,987
1918	57	6,259	£352,702

Great progress was thus made during the War. They collect, grade, pack and sell eggs. Side business is also done and they thrive better. An Eggs and Poultry demonstration train is organised by the A.C.S. and the English Intelligence Bureau supplies market prices.

Small Holdings and Allotment Societies

1912	210	13,404	.....
1918	373	56,694	.....

There was a remarkable development during the War and the A.C.S. had to start a fresh department to cope with the work.

The Miscellaneous Societies comprising slaughter houses, Auction Marts, and Produce Societies, and Fruit Societies etc. have been progressing well. In 1912 a Farmers' Central Trading Board was established and remodelled in 1913 into the Agricultural Wholesale Society.

Co-operative Credit :—Here again the co-operative movement in England was very much behind other countries of Europe. The peculiar features of the English land system have saved it from growing round co-operative credit. Tenant farmers had no need for mortgage credit and being substantial farmers they were not indebted to money lenders or traders. There were no problems of usuary and rural indebtedness as in India to be solved in England. The Great Depression, however, causing great hardships which we have described in an earlier chapter, increased indebtedness and organisation of "co-operative supply was obstructed by the social conservatism of tenant-farmers, the ubiquity of vested interests, and by the demoralising influence of wealthy estates, which encouraged the farmer to expect more from rent reduction than from personal effort." Taking of credit was thought to be a matter of disgrace and the

spirit of individualism discouraged any co-operative association for mutual help. The Small Holdings and Allotments of the first decade of the present century gave a stimulus to the development of credit banks. In 1912 there were 46 such co-operative credit banks with 863 members and £1,884 loans grants. In 1915 the number was 45.

The War gave a rude shock to these banks and in 1918 their number came down to 22 with 322 members and £244 as loans grants. The Raiffeisen type of unlimited liability banks were developed in the beginning. This was objected to and the Board of Agriculture with the A.C.S. succeeded in getting the liabilities limited by guarantee or share capital. Arrangements were also made with joint stock banks for advances to societies. Since 1916 a new scheme of granting credit on the purchase of goods by co-operatively organised farmers has been put into operation. We have seen how the Ministry of Agriculture blessed co-operation but failed to appreciate the difficulties of its application to English agriculture in the post-war period. This is borne out by the still-born credit schemes and legislation of the times as

the Agricultural Credit Acts of 1923 and of 1928 were. The latter tried to popularise chattel mortgage but the farmers refused to use them for short term credit. The State aided credit, therefore, was only effective in the field of mortgage for landowners' benefit. The *Agricultural Mortgage Corporation* of 1928 is doing excellent work but there is no scope in it for co-operation. *Its shareholders are great banks; it is a non-profit-making concern and does business deliberately on less than commercial terms.* Thus in 1934 it reduced its lending rate from 5% to 4½% although it had secured its capital at 5%. It even allowed repayment before they were due and thus passed its dividend for 1936.

A commission of 1913 assigned the following causes for the failure of co-operative credit movement in England :—

- (a) Rural districts are not burdened by the usurer to the same extent as in foreign countries.
- (b) Branches of joint stock banks enable cultivators to obtain loans on reasonable terms as regards the rate of interest charged and the nature of security demanded.

- (c) There is a general reluctance to incur the risk of unlimited liability.
 - (d) The average farmer is unwilling to disclose his financial position to his neighbours.
 - (e) It is a general practice with merchants to give long credit to agricultural customers.
 - (f) A farmer would rather obtain goods on credit than borrow actually cash.
-

CHAPTER XV

LABOUR PROBLEMS

Factory Legislation

The evils of the modern factory system of production in mass, in anticipation of future demands and involving the regimentation of a large number of moneyless, propertyless and wage-earning proletariat in rigid conditions of strict discipline and routine, long hours of work, especially for children and women, insanitary and unsatisfactory conditions of work in the factory, absence of protection against, and compensation for, injuries and accidents in the period of employment; risk of unemployment and dismissal caused by inventions, the lack of personal touch between the employer and the employees and the truck system with its perpetual indebtedness and thralldom of the workers, appeared first in all their virulence in England in the wake of the Industrial Revolution. The cupidity and greed of the employers caught by the mania of growing rich quickly during the transitional period, low wages and high prices led to unscrupulous exploitation of labour parti-

cularly of women and children because they were cheaper to employ and more easily amenable to control and discipline. For a long time these evils were left unremedied because there was a widespread public ignorance about their existence but fundamentally because the predominance of the *laissez faire* doctrine prevented the Parliament from interfering with the freedom of enterprise and contract by which the British statesmen and politicians swore. Therefore, even when the evils of the much trumpeted unfettered and free competition were brought to light the Parliament was reluctant to pass any legislation to regulate the conditions of work in the factories. Even the old Elizabethan code of apprenticeship and wage regulation was removed from the statute book in the period of the ascendancy of free trade and enterprise. The combination laws of 1799 and 1800, making it criminal for workers to combine in restraint of trade, prevented the taking of any concerted action by the labourers to better their lot. Slowly but steadily the evils of free competition and individualism and the injustices and inequalities of the modern industrialism were realised and the social conscience was

aroused against them. From the beginning of the 19th century social reformers, philanthropists and humanitarians and socialists began to agitate extensively and persistently for state intervention. From the third decade of the last century the growth of the trade union movement, the rise of the political Labour Party, the awakening caused by the War and the establishment of the I.L.O. in 1919 as a branch of the League of Nations have led to the passing of factory laws with a view to protect the helpless workers against the ruthless exploitation of the employers and to secure to them human conditions of work and a reasonable standard of comforts. The mechanisation of industry and rationalisation and a growing realisation of the fact that there is a fundamental community of interests between the employers and the employees has also led to the institution of a number of beneficent and benevolent schemes of social insurance and industrial welfare.

Factory legislation began in England in 1802 with *Peel's Health and Morals Act* passed in the interests of children employed in the cotton factories. In 1819 it was extended to non-apprenticed children. The early factory acts

regulated the employment of women and children by restrictions on the age of children and on hours of work of both women and children (12 hours). In 1833 all textile factories except silk came under regulation when the hours of work for labourers under the age of 18 were fixed and four inspectors were appointed to inspect the operation of the laws. In succeeding years, agitation centred round a ten hour day and the inclusion of mines and other industrial concerns under the factory laws. In 1847, the *Ten Hours Bill* became law whereby the maximum hours of work for women and young persons below the age of 18 became 58 a week. There was no legal limit to the hours of work for adult males who put in 15 hours' work under the shift or the relay system which practically nullified the Act of 1847. Even for women and children the change was a curse because there was no accommodation by employers for rest. In 1850 therefore the working day for women and children was made to coincide with the legal period of employment after making allowance for meal times. But there was no normal day for young children as yet. In 1853, therefore, the normal day (6 a.m. to 6 p.m.) was extended to children

and at last the adult males secured in this indirect way a ten hours' day. Thus *the second mile stone in factory legislation was the prohibition of employment of women under ground in mines and of women and children during the night shifts.* Certain precautions for the safety of the workers during work like the fencing of machinery were also prescribed. Hence, the coal mines and some other dangerous trades being excepted, there was no legal restriction on hours of work except the regulation of the employment of women and children. Moreover, the factory acts so far regulated only such workshops and factories in which motive power was used and where more than 50 people including women and children were employed so that all establishments without women and children or without the use of motive power were left unregulated and in these workshops (employing less than 50 souls) the exploitation of women and children continued unabated. The shifts and subtle devices to evade the law by the employers provide a very interesting chapter in the history of factory legislation. It has been authoritatively proved that women and children were driven out of the back door while the factory inspectors entered

from the front gate or at the sight of his approach the children were marched to the schools maintained by the employers in close vicinity of the workshops. The factory employers had a legitimate complaint that while they were prevented from employing women and children, the smaller employers in the workshops exploited them in the same street.

This led to the passing of the *Workshops Regulation Act of 1867* but being mandatory it had no effect. Moreover, the paucity of factory inspectors, the hostile attitude of the free traders both official and non-official, and the reluctance of the people to incur unpopularity to get its provisions adopted prevented it from having the desired effect. Reduction in hours of work was objected to on the ground that it would diminish output and hence profit and industry. The Owenite argument that reduction of hours might increase output through improved efficiency was not appreciated. The onward march of material prosperity which England experienced after the adoption of free trade blinded the individualistic employer to the injustice, or inexpediency or the inhumanity of a system which kept "children of six at work

in factories from 5 a.m. to 9 p.m., girls under 8 crawling through coal seams 18 inches high, boys of 4 sent up in flues seven inches square." Unfortunately the economists of the period showered encomiums on the spontaneous and natural order of things in industry and trade and it was suggested to the workers that the key to the solution of their poverty, indebtedness, exploitation and helplessness was to be found in birth-control and artificial regulation of supply of labour. But the trade depression which affected the major industries very adversely during the 'seventies of the last century and the consequent strife and strikes resulting in untold hardships and miseries resulted at last in arousing the English social conscience from its long enduring slumber and led to the appointment of the Royal Commission of 1876.

The Commission classified the trades for examination in 3 groups: textiles, non-textile factories and workshops. Grave abuses were found in all these sections into the details of which it is not possible to go here. On the basis of their recommendations, the *Factory and Workshop Act of 1878* was passed whereby the arbitrary distinction between factory and work-

shop was abolished, conditions in both were brought in line, the normal day was to be from 6 a.m. to 6 p.m. or 7 a.m. to 7 p.m. and the age of young persons was raised from 13 to 14 years. In women's and domestic workshops the working day was fixed between 6 a.m. and 9 p.m. within which only $10\frac{1}{2}$ hours were to be worked. But the hours of work of the adult males were left unregulated. Since 1878 the protection under factory law has been gradually extended to insure a larger number of workers against exploitation and to provide an efficient administration. Industrial regulation to govern conditions in all employments has developed and special laws have been passed to regulate dangerous trades like match, pottery, polishing and grinding, cotton mills, India rubber works, woollorting and lead-works. The Home Office exercises a strict control by insisting on improved ventilation and sanitation, lighting, regular medical examination, proper meal time accommodation, the use of overalls and head-coverings and prohibiting the use of certain harmful chemicals and fencing of machinery. Any occupations with a bad health record can be certified as dangerous.

Then, to control sweating on the agitation of Anti-sweating League, the *Trade Boards Act* of 1909 was passed to regulate sweated trades. The industrial regulations were codified into the *Factory Code* of 1901. The *Shops Act* of 1912-13 extended protection to shop assistants including adult males.

During the War the whole field was regulated by the state which we have described in the last chapter. *In the Post-war period the most important achievement has been the securing of the 8 hours' day or 48 hours' week under the influence of the I.L.O.* The *Coal Mines Act* of 1919 introduced 7 and 8 hours' day but the example was followed by other trades by mutual agreement. The rationalisation movement and the consequent mechanisation of industry has facilitated it but the hours of work differ from trade to trade e.g. in Coal mining trade 48 hours a week, in Engineering 47 hours a week, in Building 44 hours a week, in Docks 44 hours a week, prevail. In 1919 the employers agreed to the universalisation of 48 hours' week but the Government did not encourage it by instituting legislation. Excepting agriculture in 1923, 80% of 133 trade unions worked 8 hours a day. In less organised

industries also the *Trade Boards* have introduced 48 hours' week. Then in 1920, the *Industrial Courts Act* was passed which envisaged the appointment of courts of enquiry for the settlement of industrial disputes. *The Factory Act* of 1937 has abolished the distinctions of the 1901 Code. The working hours of females and young persons under 18 years of age are limited to 9 hours a day and 48 a week; overtime beyond this is permitted upto 100 hours a year and the *Shops Act* 1934 fixes the normal maximum hours of working of young persons at 48 and regulates overtime. The *Coal Mines Act* of 1930 has fixed the hours of work at 7 a day. In spite of this widespread application of the 48 hours' week Great Britain has not yet ratified the Washington Hours Convention.

The modern factory legislation therefore contains elaborate provisions for hours of work, holidays, pauses, shifts, sanitary arrangements, lighting, and fencing and other regulations which have greatly improved the lot of the labourers. The gradual reduction in hours of work has falsified the dark prophesies of the employers that it would reduce output. It has rather increased the industrial efficiency of the workers.

The second important item of labour legislation covers provisions against sickness, unemployment, old age pensions, and maternity benefits: a detailed discussion of which is given in the chapter that follows.

Workmen's Compensation Acts

The third important direction in which labour legislation has progressed is that of compensation to workmen for injuries during the course of employment. The modern factory and machine system of production is frequently producing mishaps and accidents. In England the *Employers' Liability Act of 1880* and the *Workmen's Compensation Act of 1897* made provisions for the payment of a scale of compensation to workmen or their heirs in case of fatal injuries. The risk of loss to the employers has been largely covered by insurance, the employers paying premia to get their men insured against accidents. This legislation has made the factory owners more careful about defective machinery and about securing prompt medical treatment for injured operatives. It has made the labour force more stable and more contented.

Legal Minimum Wage, Truck Acts etc.

Lastly, special legislation has been passed to regulate wages in certain selected industries, for example the *Trade Boards Act of 1909* provided for the fixing of minimum rate of wages in certain 'sweated' trades (*e.g.* lace finishing, ready-made-clothing) by Trade Boards consisting of an equal number of representatives of employers and employees and some additional independent members.

The scope of the Act was extended in 1913 and 1918. The *Coal Mines Minimum Wage Act 1912* applied the same principles to the wages of miners under certain circumstances. In this connection, reference may be made to the draft convention on the subject of statutory minimum wage adopted by the International Labour Conference in 1928.

It contemplates the creation of a wage fixing machinery in the case of trades or parts of trades (and specially Home-working trades) in which no arrangement exists for the effective regulation of wages by collective agreement or otherwise and wages are exceptionally low. It may be added that the wage-fixing Trade Boards in Great Britain are set by the Ministry of Labour after preliminary investigation. In those trades

where powerful trade unions exist they can very well take upon themselves the work of Trade Boards.

In certain countries like New Zealand, Australia and some states in the U.S.A. a general national minimum wage has been established by legislation. It is obvious that it is by no means easy to fix a national minimum wage even for one country, which will neither be too low to serve its purpose, not so high as to constitute a serious burden on industries and which, while suiting all industries alike, will adapt itself readily to changing social and economic conditions.

Truck Acts (1831) exist in several industries today prohibiting employers from paying wages in kind. Before they were passed, serious abuses existed, workers were compelled to buy their requirements from the employers' shops at unduly high prices. The quality of goods stocked also left much to be desired. The Truck Acts make payments of wages in cash compulsory.

The foregoing survey of labour legislation is a convincing proof of the new liberal attitude of the State and of public opinion towards the working classes. This attitude is fully justified on grounds of social and economic efficiency, as well as on humanitarian grounds.

CHAPTER XVI

SOCIAL INSURANCE

Causes of its growth—The unsettling effects of the industrial and commercial revolutions, low wages, high prices, long hours, insanitary conditions, lack of protection against machinery and accidents, and of provision for insurance against dismissal, sickness, unemployment and death, and for maternity and child welfare; and class distinctions and growing inequality of incomes led to sharp antagonism between capital and labour. The tyranny of the factory bell and disciplined routine and above all merciless exploitation of children and female workers accentuated the hardships of the workmen.

First developments of social insurance took place in Germany due to the paternalistic attitude of the Government and the dominance of the Historical School of Economists; the movement in Germany was unparalleled in respect of its comprehensiveness, its connection with the State and its compulsory nature.

The evil effects of the factory system of production, congestion of population in industrial

centres and towns, insanitary conditions, long hours, low wages, employment of females and children etc. in England aroused the national social conscience.

The labourer is propertyless, homeless, and lives from hand to mouth and has not sufficient resources to provide against accidents, illness, unemployment, low wages and old age. This inability of the labourer to protect himself, his family and children results in a huge wastage and impairment of national vigour which tells unfavourably on productive efficiency. Hence the necessity of a State aided scheme of human conservation through social insurance that means the conservation of men, women and children and of their capacities to add by their labour or their ingenuity to the stock of national wealth. The result is increased prosperity and contentment of the labour folk and their enhanced security and productive efficiency because the chief aim of social insurance is a tolerable standard of life for the labourer and maintenance of his physical, mental and moral vigour.

There are four aspects of the English scheme of social insurance :—

(1) Workmen's Compensation Act of 1906.

(2) Old-Age Pensions Act of 1908-1909.

(3) The National Insurance Act of 1911.—
an elaborate system of insurance against
sickness and a provision of agencies for
the conservation of National Health.

(4) Insurance against Unemployment.

The English system of social insurance, however, is not compulsory; it has a contributory basis. As regards protection against accidents there is not as yet a system of compulsory insurance but there is a thorough-going Employers Liability Law under which the employers carry insurance in ordinary insurance companies or in specially organized stock companies. It is provided by the *Workmen's Compensation Act of 1906* which guarantees occupational protection to the employees against accidents during employment. Prior to 1880, there was nothing like this in England except the reasonable precautions which the employer was expected to take under the common law to secure the safety of his employee and was liable for injuries sustained, if it was due to the fault of the employer. There were various loop-holes, however, for escaping the liability and it was in 1880 that the principle of employers' liability was codified.

This act was amended in 1893 and 1897 when the first Workmen's Compensation Act applying to dangerous trades *i.e.*, factories, quarries, mines, railways and buildings was passed and affected 6 million labourers or about $\frac{1}{2}$ of the total labour population of England. Under this the employer was compelled to insure his workmen of all grades against injuries caused by accidents, provided they resulted from, and were in the course of, employment and were not attributable to the serious and wilful misconduct of the injured workman. The Act of 1906 was a consolidating act and swept away the incongruities of the existing acts and extended the benefits of the law to every occupation, including domestic service except persons earning more than £250 a year and shop assistants, policemen, the members of the employer's family and persons casually employed.

An employee who is injured during working hours, is entitled to compensation, provided he is disabled for one week and provided also that the injury be not caused by the employee's serious and wilful misconduct. If the disability is longer than one week the compensation is half the average weekly wage, including board

and lodging to a maximum of pound one a week; if the injury is permanent the compensation is due weekly as long as the beneficiary lives. On the other hand, if the employee dies, the employer has to pay reasonable medical and funeral expenses to a maximum of pound ten, and if the deceased leaves behind dependents, the employer has to pay, to such persons a sum equal to three years wages, the maximum being £300 and the minimum £150 and in case of persons partly dependent, compensation is payable at special rates.

As per the *Old-age Pension Act of 1908*, pension is payable after the age of seventy to every person male or female, married or unmarried who has been a British subject at least 20 years and a British resident at least 12 years and who has not been habitually disinclined to work and provided further, that annual income is not in excess of £31-10 shillings and the recipient is not in receipt of poor relief. It is very clear that *no person in England can receive a pension and poor relief simultaneously*. Another important feature of the English system of old-age pensions is that *they are paid entirely from funds raised by general taxation, no contributions on the part of either*

employers or working men is required, i.e., it is based on the non-contributory principle. The amount of the pension is graduated in accordance with the annual income of the recipients, for example, qualified persons whose annual income does not exceed £21 receive 5 shillings a week, between £21 and £23-12-6, 4 shillings a week; those between £23-12-6 and £25-5-0, 3 shillings a week; those between £25-5-0 and £28-17-6 receive 2 shillings and those between £28-17-6 and £31-10-0 receive one shilling a week. *In no case may the sum of independent income and pension exceed 10 shillings a week. The pensions are paid weekly in advance through the post office and the scheme is administered by the Local Government Board.*

The crowning feature, however, of the social insurance movement in England was the provision for sickness and unemployment insurance and the *National Insurance Act of 1911*. There are 87 clauses and schedules in the Act which deal with, first, *insurance against ill-health*, and secondly, *insurance against unemployment*.

The first part provides for compulsory insurance against sickness and invalidity of every worker. It includes all permanent residents, male or female, married or single between the ages of

16 and 70, engaged in manual labour and getting any income; and residents engaged in other than manual labour whose income does not exceed £160 a year; but it excludes non-paid apprentices, unpaid children working for their parents, and wives and husbands working for one another, pensioned Government and municipal employees and all others who do not depend upon employment alone. While with these exceptions employees are compelled to insure, other persons under 65 living on their employment and not getting an income in excess of £160 a year, may insure if they like and must pay the equivalent of an employer's contribution as well as their own. The scheme applies to the entire working population of the kingdom and is administered through approved benefit or friendly societies which have been practising insurance against illness for a very long time and persons may be insured in more than one society at a time. *The worker is aided in his insurance by a compulsory contribution from the employer; whereas the employee's contribution is deducted by the employer from his weekly wage and is paid over to the State.* The worker pays 4d. a week, if a man; 3d., if a woman; and the employer pays

3d. for each employee and the State contributes two pence, but if the weekly wage is under 15 shillings, the employer pays proportionately more and if the wage does not exceed 9s. a week for a man and 8s. for a woman, the employee pays nothing, while the employer pays 7d. for man and 6d. for woman.

The insured worker gets four kinds of benefits—medical, sickness, invalidity and maternity. The aim of the system is the restoration of the health of the worker who falls ill when the insurance committees arrange for physicians who are paid by the State from the insurance fund. *Special provision is made by the State for the treatment of tuberculosis in well equipped sanatoria.* Sickness and invalidity benefits commence from the 4th day of incapacity and vary according to age and sex. For persons between 21 and 50 the benefit is 10s. a week for men and 7s. 6d. for women during the first 26 weeks of sickness and thereafter a uniform rate of 5s. a week is paid to all; for minors and for persons between 50 and 70, the rates are lower. From the 26th week, the payment is called disablement or invalidity benefit. The insured is entitled to it only after two years of contribution to the fund, and at the

age of 70 the 'benefit' ceases. Finally, insured women and wives of insured men get a benefit of 30s., while in the case of wage-earners, it is doubled by the payment of sickness benefit as well. There are four separate boards for the four parts of the country and a committee of the board makes necessary adjustments; and local administration is carried on by local councils' representatives of the various interests concerned.

A second main division of the National Insurance Act is provision against *unemployment*. Until recently the extention of poor relief and occasional establishment of distress works to provide for food, lodging and a small cash payment were the only measures against unemployment. In 1905, *Unemployed Workmen Act* was passed for the establishment of distress commissions to provide employment to the idle by means of a common fund, half of which was paid by the Government and the other half by the local counties; and by 1910, it was extended to 89 municipalities. The Poor Law and ordinary charity failed to tackle the problem of unemployment and, therefore, in 1909, the Poor Law Commission recommended the establishment of *Labour Exchanges*, but it is a pity that

even to the present day the report of the commission had received but scanty attention in Parliament. In 1909, however, the *Labour Exchanges Bill* was passed according to which the U.K. was divided into ten districts each under an inspector together with the provision that in all important urban centres, labour exchanges would be established to supply the worker with employment information and to promote the mobility of labour. There are three grades of exchanges differencing according to the population of the town they are located in. In addition to bringing the employer and the employees together the bill provided also for loans to the labourer to enable him to travel to the place of employment. The exchanges have voluntary registration, but are maintained by the State.

To provide, however, for insurance against unemployment for a large number of workers who were not insured against unemployment through trade unions, the National Insurance Act of 1911 provided that all labourers above 16 engaged in a stipulated trade must be insured against unemployment under a system supported by joint contribution of employers and employees and aided by a State subvention. The

worker pays $2\frac{1}{3}d.$ a week, the employer $2\frac{1}{2}d.$ a week for each employee and the state $1\frac{2}{3}d.$, but the employers are entitled to recover one-third of their contributed amount in the case of labourers hired by the year. The benefit provided is 7s. a week through a maximum period of 15 weeks of unemployment in any year and for employees of 16 to 17, 3s. 6d. only. At the age of 60 every insured who has contributed during 500 weeks is entitled to a return of all contributions made by him with compound interest at $2\frac{1}{2}\%$ less any amount of benefits received by him. Besides this compulsory insurance, there is a provision for voluntary insurance as well.

Changes in Social Insurance during the war and post-war period: The National Insurance Act was broadened in its scope in 1916 to include workers in the metals, leather, rubber, chemical and ammunition trades. In 1920 the system was further extended to include all workers except those engaged in agriculture and domestic service and affected 12m. persons. The "dole" to the unemployed during the post-war depression reached enormous figures and various acts were passed in rapid succession to change the

benefits, the contributions and the methods of administration of unemployment insurance and relief. The weekly allowances between 1920-24 were 15s. a week for men and 12s. a week for women and the total expenditure on unemployment insurance in the period was £190 m. In 1924 the Labour Government strengthened the scheme of compulsory insurance by abolition of the gap which left the labourer unaided after the payment of 12 weeks' benefits. The benefits were made *continuous*; by increasing the benefits to 18s. a week for men and 15s. for women and by diminishing the waiting period from six to three days of continuous unemployment. The opposition amendments limited the operation of these changes to June 1926. Moreover the Labour Government tried their level best to push forward their programme of solving the problem of unemployment. The most important items in this programme were construction of arterial roads and public works, stimulation of foreign trade by export credits scheme, and financial aid to projects of land drainage and reclamation, erection of electrical power stations and abolition of unproductive military expenditure in the Near and Far East. Moreover,

separation allowances; and war pensions to widows and Government compensation for disability in military service were also developed.

In 1931, by the National Economy Act, contributions for an adult male worker were fixed at 10*d.* by employee and 10*d.* by employer and for adult females 9*d.* from each party while the State contribution remained unchanged. Benefits for men and women over 21 years were reduced to 15*s.* 3*d.* and 13*s.* 6*d.* respectively and benefits for a dependent adult were reduced to 8*d.* but no change was made in the case of dependent children. The Act of 1934 restored the benefits as they were before 1931. Unemployment Insurance has been extended by the Unemployment Insurance (Agriculture) Act of 1936 to agriculture also the rates being 4½*d.* for men per week from the employer, employee and State and 4*d.* for women. The rates of benefits are 14*s.* a week for males and 12*s.* 6*d.* a week for females. The maximum is 30*s.* a week.

The National Health Insurance Act of 1911 was amended several times (1913, 1918, 1919, 1920, 1921) and finally consolidated in a single Act in 1924. The upshot of all these changes

was to cover all employed persons over the age of 16 with the exception of certain public servants getting a pension and sickness benefits, teachers, honorary workers, non-manual workers earning more than £250 a year and casual labourers. The contribution generally was 5*d.* a week for a man and 4*d.* a week for a woman to which the employer was to contribute another 5*d.* in each case. In addition to 2/9 to each, total contribution for each employed, the Government makes special appropriations to the fund where necessary. The Health benefits now include free medical attendance, sickness payments, 'disablement' compensation after 26 weeks of sickness benefits; a maternity allowance of 40*s.* on confinement and certain additional benefits from societies with a disposable surplus. The scale of cash payments is usually based on the number of contributions paid in the previous year.

The Old Age Pensions Act of 1908 has been modified similarly in its scope and administration. By the Amending Act of 1924 the maximum income of a pensioner permissible is 35*s.* a week or £91 a year. To determine the rate of pension the first £39 is ignored. Since 1919 the weekly rate of pension on incomes in excess of £39 has

varied from 1s. to 10s. The Act of 1924 increased the number of pensions by 1,70,000 so that now more than a million receive pensions. ' In 1937 a voluntary contributory scheme was introduced for persons not compulsorily insured if their total income is not over £400 a year for men and £250 for women.

CHAPTER XVII

INDUSTRIAL DISPUTES

Causes of Industrial Disputes :—

- (a) *The insecurity of modern industrial life due to production en mass, specialisation and machinery for meeting anticipated future demand.*
- (b) *The mental outlook of the worker—dullness of mind and monotony of life due to narrowing down of the intellectual and moral outlook through excessive specialisation.*
- (c) *Impersonal relationship between the employers and the employees. “The firm is an abstraction with which he can stand in no form of living contact.” This lack of human touch breeds misunderstanding and culminates in strikes and lockouts.*
- (d) *The physical and social conditions of the work in the factory :—Long hours, strict routine discipline, short leisures, insanitary housing conditions and low wages.*

Industrial unrest first became prominent in the depression of 1879 as a protest against the

existing industrial order, and the workers advocated state intervention to safeguard the standard of life of the helpless workers. This resulted in schemes of social legislation to save the worker from the worst conditions of industrial accidents but it did not solve the problem of reconciling the interests of employers and employees. The succeeding periods of depression (1886, 1894, 1903, 1911, and 1922) were each marked with intensified strikes reaching in 1911-12 and again in 1926, the proportions of a revolution.

During the War, however, in face of a national calamity, an industrial truce was called, and, only when prices began to rise, there was a complaint of '*profiteering*' and unrest began again. This was intensified, when shortage of labour led employers to demand relaxation in Trade Union Regulations to employ unskilled men on skilled work. In spite of opposition, however, "dilution" had to be accepted under the Munitions of War Act 1915 which abrogated trade union customs and restricted the free movement of labour and also limited the profit of the munitions manufacturers and *made arbitration compulsory*. After the short coal strike of 1915, and labour unrest of 1916-17 the industrial

truce continued during the War. In 1917 Whitley Commission of Enquiry into Industrial Disputes emphasised that the cost of living had increased disproportionately to the advance in wages, that the distribution of food supplies was unequal, that some sections of the community were profiteering; that the restrictions on the free movement of labour, changes in the working conditions, and dilution of labour were serious causes of unrest while bad housing conditions, liquor restrictions, and industrial fatigue gave rise to discontent. It also said that there had been inequality of sacrifice, that Government had broken serious pledges, that trade union officials were no longer to be relied upon and that there was a woeful uncertainty as to the industrial future.

During the War little account was taken of the long working day and overtime was commonly worked but with the restoration of normality, the interrupted conflict around the problems of hours of work was resumed. In most trades the principle of *8 hours a day* was conceded in 1919, but it was not made general. The miners continued to agitate for a *7 hours day* and the Government appointed a *Royal Commission*

The coal industry was again the principal cockpit in the struggle. The mine-owners demanded *the repeal of the 7 hours day act of 1919* and the restoration of 8 hours on the same wages. Recommendations of the Whitley Committee had met with general approval. The squalid and insanitary dwellings, the polluted atmosphere and universal ugliness led to unrest in the mines. Disillusioned by a failure of the Labour Party since 1906 to bring about any noticeable change in industrial conditions, the miners showed a disposition to be little interested in political action. The spearhead of the militant Labour agitation was the shop-stewards' movement which towards the end of the War developed a strong political character and eventually merged itself into the Communist Party.

The Post-War Period:—The period from 1919-1932 was a time of greatly intensified industrial activity and conflict. In the first half of it with rising prices and wages the labourer was in a strong tactical position and fought to re-establish his standards and privileges. In the latter half with rapidly falling prices and wages, unemployment was growing apace and the employers took advantage of this. The Samuel

Employers and the general public suffer due to the disorganization of production specially in Public Utility Services like railways.

(ii) National industries cannot progress unless industrial peace is secured.

(iii) National power and solidarity can never be acquired unless industrial peace is obtained.

(iv) Strikes etc. even demoralise the worker.

(v) In the absence of industrial peace, a country may run to poverty.

Prevention of Industrial Disputes:—

The existence of efficient organizations on either side—sound Trade Unions of Workers and Employers' Associations, competent to speak for their respective sides—will prevent the occurrence of sporadic strikes and lockouts and the formulation of grievances after, rather than, before going on strike.

Another much discussed method in recent years is the joint control of industry by workers and employers organized into Joint Industrial Councils, *e.g.*, those in Great Britain on the lines recommended by the Whitley Commission of 1917. They advocated for each industry (i) Workshop Committees in individual firms (ii) District Councils in each region (iii) A Joint

Industrial Council for the whole industry on a national basis.

Joint Works Committees represent workers and employers in an industrial establishment and are responsible for fixing the condition under which work is carried on. These committees are intended to some extent to overcome the disadvantages arising from the fact that under modern conditions the old personal relationship between operative and employer has disappeared. *District Councils* are intended to link up the Joint Works Committees with *Joint Industrial Councils* of employers and employees representing the whole industry. The Whitley Commission discussed not only wages, hours and other conditions but also broader issues like educational welfare. The Whitley Scheme, though voluntary and favourable to industrial efficiency is handicapped by the following defects :—

- (i) The agreements entered into by these councils cannot be legally enforced.
- (ii) The organization of the Whitley Councils cuts across that of the trade unions. The latter are mainly organised by the trade and not by individual workshop.

Plans of Profit-Sharing may also prevent disputes.

Conciliation and Arbitration of Industrial Disputes :—

We may next consider the machinery for settling industrial disputes after they occur. In industry as in international politics war is coming to be recognized as a last resort, and the need for conciliation and arbitration of disputes is being increasingly recognized.

The essence of conciliation lies in joint conferences, and success depends on the existence of responsible and well organized associations of employers and employees. Adjudication of a dispute that has come to a head may be called arbitration, which is effected by the help of outsiders. *Conciliation and arbitration may be effected through private or public agencies. It may be voluntary or compulsory.*

Voluntary public arbitration exists in Great Britain, and India has followed this example, while the best known examples of compulsory arbitration are found in Newzealand and Australia. In Great Britain, the beginnings of a policy of settling industrial disputes can be traced to the Conciliation Act of 1896 which was permissive in its character. Conciliation or Arbitration Boards could be registered on

application to the Board of Trade, which was empowered to appoint conciliators and arbitrators for bringing together the parties in dispute.

A further step was taken when under the Act of 1911 an industrial council consisting of a joint panel of 26 members equally representative of employers and labour and a permanent official was appointed. The council was to inquire into trade disputes and was to be regarded as supplementary to the organizations set up by the earlier Act.

The Industrial Courts Act of 1919 established in Great Britain a machinery for the voluntary arbitration of industrial disputes by setting up a standing industrial court consisting of an independent chairman and other independent persons and an equal number of representatives of employers and employees, all appointed by the Ministry of Labour. Both the parties to a dispute may by mutual consent refer any dispute to the Court, which after making inquiry and taking evidence, makes a full report. But the voluntary principle is still observed and the decision of the court is not binding. Public opinion is regarded as the decisive factor in settling disputes and the main function of the

court is to help the clear framing and discussion of the issues regarding costs, profits and wages. The Indian Trade Disputes Act of 1929 closely follows the English model.

As already mentioned above, the most outstanding examples of compulsory arbitration through the state are furnished by Newzealand and Australia. Strikes and lockouts are forbidden. Either employers or employees may submit their disputes to the Arbitration Tribunals whose decisions are binding. One or several legally trained persons constitute these tribunals, which may also have some members who are well acquainted with the particular industries.

The most serious objection to compulsory arbitration of industrial disputes is that it discourages settlements by the disputants themselves and encourages the tendency to depend upon some external authority for the preservation of peace. It also does not appear to be suitable to a highly industrialised country like England where the technique of production is always changing.

The adoption of the Whitley reports by the Government led to the rapid establishment of Whitley Councils in many industries but they did

not exist in the Unions of the Triple Alliance and other troubled industries. To bring all industries together, therefore, the Government summoned in 1919 a joint industrial conference of employers and employees of all trades which unanimously decided to form a permanent National Industrial Council of 400 members to represent equally both employers and employees. It meets twice a year and a large standing committee meets once a month. It is a Government recognised official consultative authority on industrial matters and epitomizes the democratic control over industry

CHAPTER XVIII

GROWTH OF TRADE UNIONISM

Trade unionism *i.e.* the union of a number of trades is essentially a modern institution. It is fundamentally a product of the Industrial Revolution. As Shadwell has put it, "the factory made it possible and the conditions of the factory made it necessary."¹ Under the old industrial economy there was no doubt an organisation of craftsmen into guilds but these guilds differed from the trade unions in certain fundamentals. The guilds were associations of craftsmen who were both employers and employees and they protected and regulated the craft as a whole; but a trade union is essentially an association of employees only to protect the interests of the workers as a class against the employers as a distinct class. The motives of both guilds and trade unions, however, are the same: the elevation and maintenance of the standard of living of the workers by restricting competition and bargaining collectively. In the guild economy the apprentices, the journeymen and the master

1. Industrial Efficiency, p. 307.

craftsmen had very cordial relations; they came into close personal contact and shared to a certain extent the advantages of the association. So long as the guilds had been inclusive there was hardly any cause for antagonism between the employers and the employees and for their separate organisations. When the guilds grew exclusive and distinctions began to be made between the liveried and the non-liveried members and when the master craftsmen became well-to-do employers and the prospect of an apprentice or journeyman ever reaching the position of the master employer became remote in certain trades, there came into existence separate combinations of journeymen which broke down the guild system. This happened in the 14th and the 15th centuries. And as the domestic system of production grew up such journeymen's associations became numerous among tailors, hatmakers, shoemakers, woollen workers, etc., for their protection. But it was only by the end of the 18th century that influential and permanent combinations of labour came into being in various trades *e.g.*, metal workers in 1787, weavers in 1792, paper makers in 1795 and woollen workers in 1796. Even then

the small and scattered establishments and the regulation of wages, hours and other conditions of work by law did not provide an opportunity for union amongst the labourers in most trades and the common law was also against combinations. The opposition between the employer and the employees was not so sharp because of the close contact. With the advent of the factory, however, all this was radically altered. The huge factories, the large business units, the railways, etc. created a wide gulf between the employers and the employees. There was no opportunity for personal contact between them. Labour and capital were differentiated and antagonism between them developed and led to cleavage. The close personal touch which fostered mutual understanding and goodwill in the earlier period was now non-existent. "Personalities were relaxed or entirely dissipated; bargaining concerning wages and hours became collective, impersonal and cold-blooded."² But the factory brought the employees of different grades in the same trade or establishment more closely together and afforded an unprecedented opportunity to the labourers

2. *Ogg: op. cit.* p. 417.

to feel their community of interests as to wages, hours, and other conditions and developed into them a spirit of class-consciousness and made their organisation for mutual protection very easy. As the 19th century wore on, low wages, long hours, high prices and other evils of the factories made their operatives seek their amelioration by concerted or collective action. With the abolition of the Statute of Apprentices the employee was at a disadvantage which could be remedied only by combined action.

In spite of such favourable conditions for their growth, trade unions grew up rather slowly and spasmodically. Ignorance, poverty, lack of training and funds were serious obstacles in the beginning in their formation. But the greatest difficulty was a hostile public opinion and the existence of Combination Acts and restraint laws. An organised body of workers, to secure more favourable conditions of work for themselves, has only the weapon of strike or concerted refusal to work except on certain terms to attain its objective. And such acts or even the combinations of workers contemplating such acts were strictly forbidden at the Common Law which held that concerted efforts to influence wages,

hours, prices, or apprenticeship etc., were conspiracies in restraint of trade. Many journeymen in various trades were punished with imprisonment and fines in the 18th and the early 19th centuries because they demanded an increase in wages etc. The influential classes of the country were strongly opposed to the trade unions. The employers naturally opposed them for fear of higher wages and increased strength and influence of labourers, the aristocracy opposed them because they enhanced the power of the lower classes, the clergy deprecated them as manifestation of discontent, the philanthropists distrusted them; the foreign tradesmen feared a rise in prices, the economists pinning their faith to the wages fund theory regarded them harmful and only resulting in unemployment and reduction in wages and there was a widespread feeling that "trade unions were unscrupulous bodies" and trade union leaders were agitators and disturbers of industrial peace. The same public opinion which favoured the factory laws was curiously opposed to the trade unions. "With the incompetency of their own class, the power of the employing class, the strength of the law, and the force of public

opinion opposed to their existence and actions, it is not a matter of wonder that the development of these working-class organisations was only very gradual.”³

The labour policy of the 17th and 18th centuries was directed to the suppression of combinations and to the keeping down of wages for the benefit of the growing foreign trade. The regulation of labour and its conditions of work has been practised in England from 1304 to the nineteenth century. But mediæval labour problems were rural and agricultural rather than urban and industrial. Between the reign of Edward I and George IV no less than 35 statutes were enacted in response to petitions from manufacturers restraining labourers from improving their conditions by association or public assembly. Combinations were treated as conspiracies in restraint of trade* and people concerned with them in any manner were liable to criminal prosecution. It was no doubt equally illegal for employers to combine and control an industry but the law was mostly administered

3. *Cheyney*: op. cit. p. 283.

*Even *Adam Smith* referred to them as “a conspiracy against the public or some contrivance to raise prices.”

by the employers as a class who dominated the Parliament and they enforced it almost exclusively against the employees. Upto the eighteenth century there were restraints imposed by about 20 statutes like those of Labourers of 1349 and of Apprentices of 1562 (prescribing wage rates) on individual workers also in different crafts and prohibiting acceptance of higher wages than those fixed by the justices of the peace who executed the laws and were very often employers of labour themselves. Towards the close of the 18th century in 1799 and 1800 a more comprehensive, drastic and stringent legislation was passed to combat an undue increase in secret or semi-secret organisations of labourers especially in the textile industry in which trade unionism sprang up at first. The Act of 1800 in response to many petitions from manufacturers imposed summary penalties by a single justice of the peace on persons combining with others to advance wages or decrease the number of hours of labour, or to prevent an employer from employing any person or to canvass labourers for a strike or for refusal to work with any man or to attend meetings or invite others to attend or to subscribe to the union

funds or enter into agreements regarding wages, hours or other conditions of work. A maximum sentence of 3 months' imprisonment by a summary process was provided for any one of these acts. The employers were likewise prevented from combining to reduce wages, or alter hours of labour at a maximum penalty of £200. The Act thus established free trade in labour and regarded it as a commodity; it also provided for compulsory arbitration of wages and hours. But no prosecution of an employer was ever brought under it.

All these restraints lasted until 1831, a large number of them were operative even in 1867 and it was only in 1875 that they were repealed. Efforts at relaxation and modification of these restraints, however, began in 1824 when largely as a result of the influence of one Francis Place, a Committee was appointed to inquire into, and report upon, the entire body of law relating to artisans and workmen. In the decade after the Napoleonic wars, strikes and acts of violence became rampant, agitation for and against the repeal of all statutes and labour laws was very strong and many secret trade unions had come into being. The main findings of the Committee

were that in spite of restraints many combinations of workmen had come into existence, that strike had been common, that employers had formed illegal combinations and that while the labourers had been punished the employers had escaped quite free. The Committee recommended that all statutes against labour combinations should be repealed, that settlement of disputes by arbitration should be encouraged and that both labourers and employers should be punished if they threatened industrial peace by combinations. Therefore an act was passed in 1824 embodying these recommendations and repealing some 34 statutes against combination of workers etc. The combination of workmen was made lawful and workers were relieved of punishment for agreements to alter wages or hours of labour or the conditions of work etc. But violence, intimidation, molestation, threat or obstruction to induce workers to go on a strike or join their associations or take any action re : hours and wages was declared illegal. Unfortunately, the drastic changes introduced in the combination laws by this act alarmed the employers, there was an increased activity of unions all round and workers began to impose their own terms of employment. Many

strikes took place and on a petition from ship-owners etc., another Committee was appointed in 1825, as a result of which the Act of 1825 was passed repealing the Act of 1824. This milder Act permitted and legalised combinations for reduction of hours and raising of wages or altering other conditions of work but the common law of conspiracy was left intact and any interference with the freedom of contract which it guaranteed was still punishable with imprisonment at hard labour. Thus, the first and formative period of trade unionism ended with a recognition by law (1825) of the inherent rights of the labourers to combine with a view to bring collective pressure on their employers for the amelioration of their sad and miserable lot and for changes for the better in hours and wages etc.

But this legal recognition of collective bargaining was true only of the activities of a body of labourers restricted to themselves. Any effort to secure a change in wages and hours for other workers or any strike on questions of piecework, or number of apprentices, or machinery, or non-union workmen was still illegal both at the Common Law and in this statute. The legality of unions was still incomplete. There were frequent

prosecutions of labourers and the vague words 'molestation', 'obstruction,' 'intimidation' and 'threat' of the defective statute of 1825 were very often twisted in a way to prevent any growth of considerable activity of trade unions. In spite of these shortcomings the Act of 1825 greatly stimulated trade unionism and in the succeeding decade the number of unions multiplied fast, strikes were frequent, and a movement was set on foot to organise the mass of manual workers in one grand national association. Trade clubs, or unions of artisans in the same crafts, began to give place to trade unions or unions of organised workers of different trades. Thus, was organised the National Movement envisaging a federation of trade unions through amalgamation. The leader of this movement was John Doherty who organised in 1829 a National Union of Cotton Spinners and a national organisation of building workmen also came into existence in the same year. In 1830 was established a National Association for the Protection of Labour affiliating 150 unions. With improved trade conditions trade union activity increased after 1830 and Owen and his associates planned a Central Organisation of Labour comprising the various federations.

In 1834 there was established the General Trades Union later on known as the Grand Consolidated National Trades Union. It had a membership of $\frac{1}{2}$ million of workers of all kinds, farm labourers and shop assistants, had no admission fees and tried to organise a general strike of all workers in the country for an 8 hours' day. But internal dissensions hastened its failure and collapse with the transportation of 6 Dorchester labourers in 1834 for 7 years to Australia. Its failure also reacted very unfavourably on the advance of the trade union movement which became unpopular. Strikes were repressed mercilessly.

Under these circumstances, the attention of the workers was directed towards general political and social movements of the period organised by humanitarians and thinkers of the age and supported by well-meaning and philanthropic employers. *Chartism*, the Anti-Corn Law League, Factory Reforms and the Co-operative Movement of Robert Owen got a number of adherents. There was formed in 1836 the London Workingmen's Association which put in a charter before the Parliament six demands, *viz.*, adult franchise, equal electoral

districts, abolition of property qualification for the members of the Parliament, payment to M.P.s, vote by ballot and Annual Parliaments. The *Chartists* believed in the constitutional method of redressing their grievances and social distress and discontent and contributed in a measure to the growth of class consciousness among the workers. The movement began in London with the demands of the high class artisans for better and higher standard of comforts but gradually it spread to the northern industrial towns and cities where, low wages, high prices, insanitary housing conditions and lack of educational and medical facilities etc. depressed the working class. These discontented workmen of the north were in favour of direct action and even physical force to secure their objective. The constitutionalists in the movement were more influential and in the National Chartist convention of 1838 held in London they petitioned the Parliament to accede to their demands but in vain. In the recrudescence of feeling that ensued, the non-constitutionalists became agitated and perpetrated riots at Birmingham and Newport. These uprisings were truthlessly crushed and the non-constitutionalists were muzzled into silence.

With increased mobility of labour caused by the railway and large scale production and improved industrial conditions the workers turned again to trade unionism to organise themselves on a national basis for bargaining with the employers. A miners' association with 1,00,000 membership was established in 1841 but like other national associations it was ephemeral. In 1842 the chartists with 3 m. signatures again petitioned to the Parliament to get the reforms but they met with a rebuff again. They petitioned again in 1848 with 5 m. signatures and organised a procession which was banned and stringent measures were taken to stop the disorder. Through the efforts of O'Connor a Committee was, however, appointed to scrutinize the petition and on its findings that the signatures were not genuine in many cases, no action was taken on it. This dismal failure brought ridicule upon the Chartists and the movement collapsed on account of lack of leadership, exclusive class-mindedness, want of community of interests among the members and the fact that the liberal factory reforms of Peel, the repeal of Corn Laws etc. removed to a substantial extent economic distress and weakened the force of the movement.

'Chartism was fed by economic distress and blazed out under the insults of the new Poor Law.' The distractions of the workers into chartism and other social and political reforms movement of the time weakened trade unionism but in the end labour organisation was strengthened and chartism taught labourers to work alone. "The charter was a unifying force at a time when the unequal progress of industrialism obstructed trade union extension. Out of the political experience obtained in the struggle for the charter the Labour Party fifty years later was born."⁴

With the failure of the chartist movement discredited by its dreamy and selfish followers, trade unionism entered upon the third period of its development from 1848 onwards. It was a period of unprecedented growth of unions in numbers and membership, of federations, of the inauguration of trade union congresses and of the substitution of diplomacy for class war and absence of political methods. As a result many protective county, sectional and national organisations were established and all laws restraining industrial associations were repealed.

4. G. R. Fay: op. cit. p. 388

The 'New Model Unionism' was heralded with the establishment of the Amalgamated Society of Engineers (1850-51) with a centralized administration and large contributions from members for friendly benefits (like pay in sickness and unemployment and pensions) and for organising strikes, if necessary. This type of internal organisation served as a model for the other federations which followed. They won the sympathy of non-union men and even of employers by their peaceful methods. The most notable federations were the Amalgamated Society of Cotton Spinners (1853), the Yorkshire Miners' Association (1858), the Amalgamated Society of Carpenters and Joiners (1861), Miners' National Union (1863), the Amalgamated Society of Tailors (1866), the Durham Miners' Association (1869) and the National Union of Boot and Shoe Operatives (1874). Trade unionism henceforward was controlled and guided by a 'Junta' of five union leaders (one each from the Societies of Engineers, Carpenters, Iron Founders, Bricklayers and Boot and Shoe workers) with a view to strengthen the unions by creating Reserve Funds, and federations and to secure the standard wage and

the employment of only union men by the employers. The 'Junta' also fought for political, social and educational reforms for the benefit of the trade unionists. The last notable development of the period was the establishment of permanent trade councils in important industrial centres which promoted the interests of local men and fought successfully for liberal and remedial legislation. But their most important achievement was the inauguration of the national trade union congresses held annually from 1864 onwards...

In the meantime a change in the law in 1859 made it lawful for the labourers to combine for getting an increase in wages or reduction in hours for other working men and to persuade peacefully others to join a strike. But unfortunately the progress of the trade unions was accompanied occasionally by violence, outrage and assaults and destruction of property of employers or beating of non-strikers committed by upstarts and over-enthusiasts and the trade unions were accused of covert complicity with these acts of disorder. As a result of a series of such disturbances in prolonged strikes in Sheffield, Nottingham and Manchester in 1865-

66 a strong representation was made by employers to investigate into the outrages and trade unionists also were anxious for such a committee because there was no protection of union funds against embezzlement. A Parliamentary Commission was therefore appointed at a time when public opinion was hostile to unions in the year 1867 in which the Reforms Act had increased greatly the political influence of the labourers. The report submitted in 1869 was not unanimous; the majority favoured the existing provisions and recommended that all labour combinations except those for breach of contract should be legal and registration with protection of funds against theft and fraud should be granted. The minority recommended the repeal of all legislation re: labour contracts and laid down the principle that no act of a unionist was to be illegal unless it was equally illegal by others and that no act of a combination was to be illegal if it was legal for an individual. As a result of these recommendations the trade union legislation was liberalised by passing the Trade Union Act of 1871 and the Criminal Law Amendment, the Conspiracy and Protection of Property Act of 1875 and the Trade Union Amendment Act

of 1876. By these Acts the position of trade unions was legalised; their funds were protected and they were allowed to hold property, and accumulate funds. Trade Unions were defined as "Any combination, whether temporary or permanent, for regulating the relations between workmen and masters, between workmen and workmen, or between masters and masters, or for imposing restrictive conditions on the conduct of any trade or business, whether such combination would or would not, if the principal Act (of 1871) had not been passed, have been deemed to have been an unlawful combination by reason of some one or more of its purposes being in restraint of trade."⁵ Provision was also made for their registration and for privileges and immunities enjoyed by friendly or provident industrial societies. The Criminal Law Amendment of 1871, however, gave a more clear and vigorous definition of picketing in all its forms and this led to an agitation for its repeal which was secured by the Acts of 1875 and 1876. Peaceful picketing was permitted, and no action of a combination was punishable unless the same act was a crime for an individual. But violence

5. *Ogg*: op. cit. p. 429-30.

and intimidation were still punishable under the Common Law. The Master and Servant Act of 1875 placed the workers and employers on the same footing for breaches of contract while the previous Acts had only fixed civil damages for employers and criminal prosecution for employees. Gradually public opinion also became favourable to trade unions and led to the establishment of conciliation boards for settlement of disputes between employers and employees under the Conciliation Act of 1867.

Immediately after the Act of 1871 the abatement of legal restraints, inflation of trade and the increased industrial and commercial prosperity of the country caused a widespread growth of trade unions in number and membership not only among the industrial and mining labourers but also among rural and general labourers. The formation of the National Agricultural Labourers' Union in 1872 under the leadership of Joseph Arch marked the growth of a spirit of unionism even among the stolid and backward agricultural working men. Within the short period of its existence it secured rise in wages and was later on replaced in the first decade of the present century by the N.A.L.

and Rural Workers' Union with numerous branches and a programme of rural regeneration. Trade unionism also developed among female workers in spite of opposition from malés and in 1867 the Women's Trade Union League was established for the promotion of women workers. Similarly railway workers were organised into the Amalgamated Society of Railway Servants in 1872 and grew up into a giant body later on.

But after 1874 the Great Depression caused a setback to the movement temporarily and reduction in wages, increases in hours of work and unemployment led to repeated strikes, the failures of which caused a big decline in membership and numbers of unions. Small unions were scrapped and bigger ones suffered from bankruptcy and national unions were turned into local bodies. On the whole the movement withstood the shock very well and with the return of prosperity, a decade later, it showed new vigour and strength and tended more and more towards socialism. Thus, by 1878 the movement has led to the creation of a strong group of federated unions, with large funds, substantial membership comprising important and influential

working classes and with periodicals and journals for scouting and propaganda for its spread. Their existence and the right to combine and bargain collectively for the rise in wages, reduction in hours of work and general social welfare and amelioration of working conditions had been recognised by law and approved by an enlightened public opinion and they had begun to influence powerfully the national affairs of the country. The cessation of political violence and threats and the growing democratisation of society evidenced in the Reform Bill of 1867, the supersession of the old clergymen and the deep interest of men like Kingsley and Maurice in the working class movements and their teaching of struggle and effort, the growingly moderate and orderly policy of the union leaders, the increased efficiency of labourers due to the improvements in their working conditions and the discrediting of the fallacious and wornout dogmas of economic theories of the 'Wages Fund' and 'Natural laws', etc., and the legal recognition of the legitimate trade union activities led to public acceptance of trade unions and the establishment of voluntary conciliation boards in many trades under the Conciliation Act of 1867, which empowered them

to enforce their awards.⁶ In the meantime several Employers' Organisations had also been formed in several industries and trades to give battles to the workingmen organisations and enforce lock-outs or settle disputes through negotiations with the labour organisations. They also exerted a powerful influence on industrial factory legislation of the period.

"Industrial or New Unionism" :—Between 1880 and 1899 the trade union movement ebbed or flowed with depression or boom: 1880-1892 were years of prosperity and increased union activity, 1892-95 of stagnation and 1896-99 of brisk trade and industry. The trade unions so far created were conservative and somewhat exclusive, were composed only of skilled workers in certain industries and did not include unskilled men or general workers and women, they charged large dues (generally 1s. a week) and used large funds for insurance purposes and were 'almost aristocratic in their character and policy'. They were ordinarily opposed to concerted political action and were mere 'craft unions' *i.e.*, different workers of various grades in the same industrial concern or trade like a factory, a building, a

6. *Cheyney*: op. cit. p. 287-89.

mine, a railway, etc., were not organised in a single body. They had each their separate organisation. They had none the less secured many concessions through the parliamentary committee of the annual trades union congress like the Employers' Liability and Workmen's Compensation Acts of 1880 and 1897 respectively, the employment of many workingmen as factory inspectors and of union leaders as local magistrates and payment of 'fair wages' by national and local governments through their contractors to their industrial workers. Many labour leaders were also elected in this period to Parliament on Liberal tickets and appointed to several committees and commissions. But the most remarkable feature of this period was the growth of 'industrial unionism' as opposed to 'craft unionism' and the consequential extension of union activities to unskilled and sweated trades and the inclusion of women workers.

There were several causes of this unusual activity. The poverty and frequent unemployment of the unskilled workers, who had no part or lot in union activities, and of the casual skilled workers had led to the institution of several parliamentary inquiries and reports from 1880

onwards which focussed public attention and aroused social conscience against the hardships and sad lot of these men. The spread of general primary education after 1870 among the urban labourers kindled a fire ambition in them to improve their standard by collective organisation. The preachings and teachings of Karl Marx with his clarion call to the labourers "Workingmen of the world unite" imparted a spirit of class-war and the changes in economic thought of the time discredited the earlier economic theories. The state also gave up its traditional *laissez-faire* and individualistic conceptions and the growing trend towards state-socialism favoured the organisation of labour. The franchise was also extended after 1885 and granted the right of vote to the workers and therefore their enhanced political influence. Finally, the long spell of peace enjoyed by England in this period gave an opportunity to the labourers to consolidate and strengthen their position. Hence, the growing surge towards industrial unionism since 1886 and towards socialism. The Social Democratic Federation of 1881 agitated for an 8 hours' day. A spate of processions, speeches and meetings of the unemployed led to

recrudescence of feelings and riots and they were all banned by the police. This led to more frequent and organised demonstrations, riots and imprisonments and to more determined efforts among the untrained workers and females to form unions.

The unskilled and underpaid match girls struck in 1888 and with public subscriptions and backing of Mrs. Besant and others they won the strike. The London gas workers next summer organised and struck for getting an 8 hours' day and gained it without any reduction in wages. This was followed by the famous London Dock Strike of 1889 organised by the poor, irregularly employed and unorganised labourers. £50,000 were subscribed by trade unions in England and America and Australia and the public also contributed. 10,000 men were at strike. In the end the dock labourers won and gained their objectives: minimum wage of 6d. an hour and work for a minimum period of 4 hours a day. Permanent unions among dockers were formed and soon after unskilled workers' unions sprang up also among sailors, firemen, railway workers, etc. Local unions and branches of national organisations grew up in

many industries and trades. Most of them were combinations of several different but allied crafts into one organisation and thus they brought into existence industrial unions. They had small fees, no benefit funds and their membership was inclusive. A group of new leaders came to the front and the old unions were also stimulated by the aggressive policy of the new ones. There were in all 1200 unions with a membership of 2,000,000 by 1906 with funds accumulated upto £28 m. and an annual expenditure of £10 m. There were also 265 trade councils with about a million members.*

The emergence of radical leaders threatened a breach in the congress which developed into the 'right' and the 'left' wings but the characteristics of the period were retained, *viz.*, formation of new and radical unskilled workers' union, increase in membership and funds of the unions and the emergence of industrial unionism.

Labour was also growing politically. In 1897 the demand of the A.S.E. for an 8 hours' day failed and gave a blow to the movement. In 1899 a general Federation of Trade Unions was created to supplement the activities of the annual

*Cheyney: op. cit. p. 320.

trades union congress and to strengthen the labour organisations for industrial warfare. It was affiliated with continental federations. At the beginning of the present century there had been substantial progress but in 1901 the *Taff Vale* case caused a rude shock. In the dispute re: strike, between the Taff Vale Railway and its employees, the House of Lords held that trade union funds of registered unions were liable for any damages suffered by employers through wrongful actions of their employees even if such actions were not authorised by trade unions. The company got a decree for £23,000. Un-registered unions were also similarly liable. This judgment led to an all round agitation by the labour leaders and in 1903 a Royal Commission was appointed to inquire into law relating to trade unions and trade disputes and as a result the Trade Unions and Trade Disputes Act of 1906 was passed which exempted trade unions almost entirely from legal process. Suits for damages now could not be brought against trade unions for strike or other trade disputes unless the action itself was illegal and trade union as a whole was not to be sued for action of its officers. Picketing and peaceful persuasion

were permitted and no act done in a strike was to be illegal simply because it caused a breach of contract or interfered with a man's freedom to do as he liked.

In the meantime political activities of trade unions were also growing and labour candidates were successful in elections after 1880. After the formation of the Independent Labour Party in 1893 labour members began to seek election in local councils and later on in the Parliament and in 1906 seven of its candidates and 16 of its members were elected to the House of Commons. It, however, claimed adherents only from radicals. The vast majority of the workers formed after the Trade Union Congress of 1899 the Labour Representation Committee which, with the support of the Liberals, had secured the Trade Unions and Trade Disputes Act of 1906. This committee in 1906 assumed the name of the Labour Party and by 1912 had a membership of 1.5 m. These two groups between them had 50 seats in the Parliament in 1908. Members of the Parliament were paid no salary before 1911 and, as most of the labour members were poor, the large unions had been defraying the expenses of their election and supporting them

and assisting the Labour Party in its political work. An exception to this practice was taken by one W. V. Osborne, an employee of the Great Western Railway and secretary of a branch of the A.S.R. Servants. His union was only contributing the paltry sum of 1s. 1d. per annum in case of each member towards the maintenance allowance or salaries to the labour members of the Parliament. In 1909 the House of Lords decided that it was illegal for a trade union under the Act of 1876 to charge a *political levy* for the remuneration of the members of Parliament and ordered that the A.S.R.S. should pay damages to those of its members who were opposed to such a levy. The decision further doubted the legality of all other trade union activities except those connected with industrial disputes or regulations and thus threw into jeopardy the educational, friendly benefit and insurance and municipal and political activities of the unions. It fell as a bomb-shell on trade-unionism but it had the effect of resuscitating the labour movement which was declining in strength and of bringing unity in the labour ranks. All the political groups in the movement united to effect a reversal of this Osborne judgment in

1910 when they captured 46 seats in the Parliament and ultimately succeeded in 1911 to get a bill passed whereby the non-official members of the Parliament were allowed a salary of £400 per annum. In 1918 the election expenses were also allowed to be paid by the Government by the Representation of the People Act. The agitation was, however, continued because the other activities of the unions were still restricted and ultimately led to the *Trade Union Act of 1913* which reversed the Osborne decision much as the Taff Vale decision had been reversed by the Trade Unions and Trade Disputes Act of 1906. The new Act empowered a trade union (registered or not) to employ its funds for political purposes on the strength of a secret ballot and without compulsion on any member to contribute for it; and authorised it to use its funds for all lawful objects provided for in its constitution. It also gave a new and more comprehensive definition of a trade union which now meant any temporary or permanent association formed for the purposes of *statutory objects viz.; trade regulation and provision of benefit for its members*. The regulation of trade therefore is the chief object of a trade union registered or unregistered.

Meanwhile, the coming of the Liberals into power in 1906 was succeeded by an epidemic of strikes. In 1907 railwaymen struck, in 1908 cotton spinners, in 1909 N.E. coast engineers, in 1910 boiler makers, in 1911 the London dockers and in 1912 again the dockers and miners, in 1913 transport and general workers in Dublin and in 1914 before the War the building trade was stopped. It appeared as if "the workers had been bitten by some restless microbe and were impatient to make good at one blow what they had failed to achieve in the long years of their stagnation." The long continued strikes between 1911-12 were very serious among miners, railwaymen and dockers. The first was a success, the second a drawn battle and the third a failure. Labourers were very restive and dissatisfied. Labour unrest was widespread and intense and sectional federations and amalgamations for effective industrial warfare began to be advocated. In 1912 the National Union of Railwaymen was formed and was followed by similar organisations of miners and other transport workers. The miners, railwaymen and transport workers formed themselves, at the eve of the Great War in 1914, into the famous

“Triple Alliance” to call a concerted general strike by their members to paralyse these industries and get concessions. The Miners’ Federation had a membership of 8 lacs, the National Union of Railwaymen $3\frac{1}{2}$ lacs and the Transport Workers’ Federation or port labourers $2\frac{1}{2}$ lacs. But this threat to these British basic industries and a possible revolution was avoided by the outbreak of the Great War on 4th August, 1914.

Just before the war therefore the situation was menacing and trade unions had 4 m. members, the youngers among them advocating guild socialism or a policy of nationalisation of industries. The prospects of an industrial peace and smooth sailing of industries seemed to be remote and gloomy. But the war compelled a policy of industrial truce between capital and labour. “During the War organised labour loyally surrendered its trade union practice in the interests of military victory.”*

At the outbreak of the War, the trade union movement comprised five big groups of trades (1) mining and quarrying, (2) metal engineering and ship-building, (3) textiles, (4) building, and (5) railway, dock and other transport trades.

*C. R. Fay: op. cit. p. 392.

These made up $\frac{3}{4}$ of the total membership which was 3,959,863 in 1914. An interesting development was the growth of federations from the beginning of the present century in the various trades and from 1899 a General Federation of Trade Unions was formed to help any union in a trade dispute. On an average not more than $\frac{1}{4}$ of the adult males of industrial classes belonged to the trade unions except in coal mining and cotton manufactures. Another interesting fact was the growth of unionism among the female workers. Besides those females who belonged to common unions some unions consisted of women only. The total membership of these in 1914 was 3,52,944, and the majority of these came from the cotton textiles. However, only one out of every twelve females employed in workshops and factories were members of unions. The funds of the unions were raised from members and varied from 7s. to £4 per head and were spent on disputes, unemployment, friendly benefits and on clerical and official expenses.

The War of 1914-18 let loose forces which very seriously and radically altered the strength, the scope, the legal status, the organisation, methods of action and the political aspirations of the

labourers not only in Europe but also in England. The first effect in England was the creation of temporary unemployment and a stoppage of all industrial disputes and strife; but after one year of the War this unemployment gave place to an acute shortage of labour and an intensity of strikes especially in the engineering trades. Four hundred and odd labour exchanges established under the Act of 1909 transferred labourers from commercial to munitions manufactures, and women and children were appealed to man those trades and shops where they were unknown before. The mass recruitment of adults depriving trades of their specialised skill and experience dislocated the productive machinery, and over 1.72 m. females and males from Dominions and foreign countries joined the labour forces of the country, but still the shortage could not be relieved completely. To meet the crisis the Government began to regulate the supply of labour by putting restrictions on recruitment and by giving up the voluntary principle in 1916. "Badging" was introduced in 1915 to exempt adults for industrial occupations and then followed a registration of all males between 15 and 65 years of age. In 1916 the Military Ser-

vice Acts conferred on the Government the powers of conscription and in consultation with the Army Council, dock and wharf workers, engineering and other war industries workers were granted exemption but the heavy demand of men for the army led to "de-badging" by the end of the year. Then the National Service Scheme was introduced and a Ministry of National Service with a Director General was created in 1917 to enrol labourers for industrial service. But in the summer of that year the intensification of the war led to the withdrawal of hands from commercial and industrial occupations. This industrial conscription on a limited scale was resented by the trade unionists.

The second feature of the Government regulation aimed at ensuring the most intensive use of the available labour supply. For this purpose under the Munitions of War Act of 1915 a munitions code was drawn up which provided (a) that both strikes and lockouts in munitions factories and workshops should be illegal and that all industrial disputes should be settled by compulsory arbitration, (b) that trade-union restrictions on production should be suspended for the war period, (c) that to quit

status of unions. Still the membership of Metal Workers' Union nearly doubled between 1913 and 1918 and the "dilution" of labour encouraged the growth of general workers' unions which by 1920 comprised 30% of the total trade unionism and during the last phases of the war the affiliation to the National Federation of General Workers became universal. Similar increase in strength was feasible in rural labour. The membership of the National Agricultural Labourers Union and the agricultural section of the General Workers Union increased from about 20,000 to 300,000 between 1914 and 1920. During the post-war period, rural unionism suffered a decline and in 1922 the membership was reduced to 100,000 and unless nationalisation of land comes into existence, it is doubtful if the farm workers will be able to achieve their pre-war strength.

Organisation has spread also to non-manual labourers among clerks, shop-assistants, commercial and bank employees, actors, teachers, technicians and lower class civil servants. National Union of Teachers, Medical Association and other professional associations have come into existence in the post-war period. In 1920 the

National Federation of Professional, Technical, Administrative and Supervisory Workers was formed. These associations are looked upon with apathy by the rank and file of the unions but it is expected to die out gradually. Thus by 1920, British Trade Unionism reached the peak of its strength with 215 unions affiliated with the T.U.C. and a membership of over $6\frac{1}{2}$ m. which comprised 60% of adult male workers and 12% of the entire population of the country. The Triple Industrial Alliance of Mines, Railwaymen and Transport Workers created a new solidarity among the labour force of the country but it lacked an effective control and co-ordination as the failure of the fateful General Strike of 1920 showed. In the words of S. and B. Webb in their History of Trade Unionism "The Trade Union Movement which then (1890) included scarcely 50% of the adult male manual working wage-earners, now include over 60%. Its legal and constitutional status which was then indefinite and precarious, has now been explicitly defined and embodied in precise and absolutely expressed statutes. Its internal organization has been in many cases officially adopted as part of the machinery of public.

administration. Most important of all, it has equipped itself with an entirely new political organization extending throughout the whole of Great Britain inspired by large ideas embodied in a comprehensive programme of social reconstruction which has already achieved the position of His Majesty's Opposition and now makes a bid for that of His Majesty's Government."

Since then the movement has suffered a serious decline and experienced a setback in its legal status. Still the membership is over five millions. In the post-war depression the epidemic of strikes and specially the General Strike of 1926 led to the passing of the Trade Disputes and Trade Unions Act of 1927. The War-recognition of Trade Unionism both by Government and employers enabled the unions to secure important improvements in working conditions notably in reduction of hours of work in social insurance and in Factory Legislation. The depression, however, of 1921 and onwards caused a setback. The Act of 1927 inserted very important changes and introduced a number of restrictions. Its chief object was prevention of general strikes such as that of 1926. According to it :—(i) once a strike has been declared illegal

the protection conferred on the Trade Union Funds by the Act of 1906 disappears. (ii) Protection is granted to persons refusing to take part in illegal strikes. (iii) Intimidation is defined and forbidden. (iv) Rights of civil servants joining trade unions with political affiliations have been limited. (v) Public authorities have been forbidden to make trade union membership a condition of employment. (vi) Restrictions upon picketing have been considerably increased. All these restrictions have been resented very strongly by the Trade Unionists, because they impinge upon their freedom and the Labour Party has kept in its programme the withdrawal of these restrictions. The Labour Government of 1931 introduced a bill to amend the Act of 1927 to the satisfaction of trade unionists, but being in a minority the bill was withdrawn for lack of support. Still the movement has increased in strength and influence.

The post-war changes in the structure and organization of the British Trade Union Movement may be summarised as follows* :—

(i) A growing trend towards amalgamation of smaller into larger unions. According

* *Ogg and Sharp : op. cit.* p. 762-764.

to the Act of 1917 if a 20 per cent. majority of Union members of two or more unions out of a fifty per cent. ballot desires federation, they can achieve it.

(ii) Industrial Unionism has increased and an "Employment Unionism" has come into existence.

(iii) The constitutional powers of the T.U.C. comprising 4/5 of the total unionists have been appreciably increased.

(iv) The political power of labour has phenomenally increased. This is proved by the formation of Government by the Labour Party twice, *i.e.* 1924 and 1929 within a decade.

CHAPTER XIX

TRANSPORT

Roads, Canals and Railways

The development of large-scale capitalistic farming and manufactures ultimately hinged on adequate means of transport and communications. The revolution in industry which took place in the period from 1760-1820 was completed only with an improvement in transport. In fact, as has been mentioned previously, there were two phases of the Industrial Revolution from the point of view of means of transit. The first coincided with the period of the metalled roads and canals (1760-1830) and the second with the period of the railways, the steamship, the penny post and the telegraph. All these improvements in the means of transit had been accomplished between 1825 and 1850 to meet the growing needs of the industrial revolution for production and distribution and in turn they heralded the dawn of a commercial revolution.

Prior to this period, however, the conditions of inland communication and transport were most unsatisfactory. The Roman roads, which

were fairly good in the Middle Ages,¹ had decayed and worn out by this time and many of the new so-called roads were simply tracks, meandering through heath and fen or bridle paths and country lanes impassable except for pack animals like horses and mules and for riders. They were often infested by robbers and cut-throats.² At the eve of the Revolution, therefore, the pack horse was "almost the only means of transportation" and it was too inefficient and inadequate to meet the demands of expanding trade and industry. In fact as late as 1832 the condition of these provincial roads was so execrable on account of ruts that Sir Walter Scott on his return from Europe as a sick man preferred to travel from London to Leith by a ship to travelling by overland route. True it is that there had been slight improvements during the 17th century in the public highways of the country which were kept in repair by the labour of the residents of each parish for six days in a year (the Statute of 1555). Still according to the testimony of Macaulay, Defoe and Arthur Young it appears that these highways were

1. *Gibbins.*

2. *Ogg: op. cit. p. 236.*

wretched in the 18th century. Wheeled traffic which was coming into vogue towards the close of the 17th century was nothing short of a scandal on account of the deep ruts. Six horses assisted very often by oxen were yoked to the coaches of the gentry to drag them on. The rivers no doubt were used for commercial purposes but very few of them were navigable without improvements to long distances and navigable lakes did not exist in a chain. Moreover, landlords and industrialists interfered with merchants for their private rights. Canals, which could convert them into navigable and useful water-highways were still to come. In the absence of peace and a rich industrial hinterland there were no good trunk roads, and the big rivers like the Thames, the Severn, the Mersey, the Trent and the Ouse served as the main highways of trade communicating the interior with the sea which alone gave the semblance of a commercial unity to the whole country. In spite of this lack of sufficient and good highways for internal communication and a poorly developed interior "the traffic of the 17th century England attained to imperial dimensions,"³ on account of the insularity of her

3. *C. R. Fay: Adam Smith to the Present Day*, p. 173.

position and the service of the sea as the trunk line of commerce. Both travelling and commerce were hampered accordingly.

“From London to Manchester was a journey of five days; from London to Edinburgh was one of 7 days; from London to Glasgow required a fortnight. Counties were further apart than are nations today. Overland commerce was subject to the most exasperating delays and its volume could never be large. The trade in cloth and other goods of lesser weight was carried on principally by the use of trains of pack-horses. The distribution of heavier commodities, such as coal, was virtually impossible save along the greater streams and in districts adjacent to the sea”.⁴

With growing commerce the necessity for bettering the internal communication was felt by the provinces and by the close of the 17th and the early 18th centuries they began to improve substantially the navigation of the rivers like Mersey, Don and Trent. But dearth of capital and its more profitable employment in the development of artificial canals which were more serviceable rendered river navigation only

4. *Ogg: op. cit.* p. 236-37.

an ancillary to canal transportation. As to roads, after 1660 the growth of London as the great commercial, financial, political and social centre of the country, impelled the provinces to establish contact with it by making roads and the nobles felt the necessity of better roads and speedier and more comfortable travel from London to their country villas. Then in 1665 the Great Plague and the Great Fire in 1666 in London made Londoners anxious to have easier access to the countryside for refuge in calamities like these. This led to the construction of the London Oxford road to ply "flying coaches". But even upto 1739 there were a very large number of soft unmade roads and narrow causeways on which gangs of pack-horses, with a bell carried by the leader to sound a warning to the travellers coming from the opposite side, used to run between different trade centres. The commercial traveller of those days was a bagman with bags containing samples and stocks slung across his horse.⁵ At the eve of the Industrial Revolution modern canal construction had begun as also the turnpike roads but it was only in the last quarter of the 18th century that "the

5. *C. R. Fay*: p. 175.

work of Telford, Macadam, and other engineers, and of the private turnpike companies or public authorities who engaged them, covered England with good roads''⁶ and canals.

Roads :—Like other enterprises in England, road-building had also been left to individual enterprise. As a result of this there had come into existence 'turnpike trusts' for the reconstruction, improvement and pavement of roads. A Turnpike Trust was an association of individuals holding a right by Parliamentary acts to reconstruct and pave roads and maintain them by tolls from users (excluding pedestrians) at the gates' end on either side of the improved road. These bars at which the tolls were collected were called turnpikes. "The turnpike trust was a device for piecemeal improvement in an age when local government was inert. The statute labour imposed on the inhabitants by the statute of 1563 barely sufficed for the maintenance of roads in their existing condition; a general highway rate, being new taxation, was unwelcome; and the parish as such had no security on which to borrow."⁷ With the tolls

6. *Cheynee* : op. cit. p. 185.

7. *G. R. Fay* : Adam Smith to the Present Day, p. 176.

they recouped themselves and provided a fund for maintenance and repair of the roads. With the Parliamentary sanction behind them they could also raise loans by issuing bonds and with the tolls could pay interest and amortisation.

Although the first Turnpike Act was passed in 1663 yet for a century very little progress was made because the system was not popular. Each turnpike required a separate Act and controlled but a few miles of roads; there were thus too many toll barriers hampering trade and commerce. The major portion of roads still remained under the parish management. The material of the roads was so bad that in about a month it was ground to atoms and raked off the road as puddle. The condition became still worse during winter and contact between neighbours could not be kept without imminent danger to life and limb. Moreover, the trusts were incorporated at first for 21 years only after which they were to be returned to the parish but in reality they became permanent. With a view to economy a general Turnpike Act was passed in 1773 and it was followed by another in 1831 which relieved the trustees from heavy charges on renewal. Throughout the 18th century,

however, administration was lax and jobbery was rampant and between 1730 and 1750 there was so fierce an opposition to these trusts that severe legislation had to be enacted to repress it. In Scotland, however, there was a great improvement in roads after 1750 and between 1760 and 1764 no less than 452 Acts were passed for improvement and repair of roads. The main arteries of communication in England had also been improved by the 18th century but the turnpike roads were badly constructed and inefficiently managed.

During the 19th century scientific road-building began mainly through the efforts of two Scotch engineers Thomas Telford (1757-1834) and John Macadam (1756-1836) and John Metcalfe (1717-1810) a blind man from the age of 6. They revolutionised the traffic on the main high roads. But as late as 1832 the parish roads continued to be repaired and maintained by the six days' statute labour or by a levy, or employment of paupers. No less than 52,800 paupers were employed for it in 1832 at a cost of £2,64,000.

Telford, a celebrated name both in road and canal engineering, introduced the French

method of road construction on a pitched foundation with greater width, moderate curvature, and adequate drainage and bridges; while Macadam introduced the famous and now ubiquitous method of road surfacing and dressing to a depth of fourteen inches with coarse cracked stone with a layer of broken stone of greater fineness imposed upon it and finish up the top covering with stone crushed to dust and rolled smooth. The metalled roads of the world today are named after him as 'macadamised roads'. The new methods of road construction made the roads usable in all seasons and revolutionised the traffic on the main highways.

During the grand period of road-building (1760-1880) the stimulus to road improvement and construction was provided according to Dr. Fay by the Government for military and political reasons, by the provinces for industrial outlets and commercial contacts and by landowners and farmers for better marketing facilities and improvement of their locality. After 1745 as a protection against rebellion military roads were made in the Scottish Highlands as also roads and bridges to connect them with the capital later on. Similarly in 1800 the unification of

England and Ireland led to improvement of roads for the convenience of the Irish M.Ps. and to the appointment of a commission to survey the roads to Holyhead. Increased postal business also stimulated improved local roads and through communications to provide which the Government facilitated by legislation, the growth of turnpike trusts. The provinces with their local outlook improved the local roads but even this regional improvement gave an impetus to industry and agriculture of the surrounding areas. These local roads built by the parishes and important industrial towns were like the curate's egg only good in parts and very bad specially in the industrial north. "The men had to take a hedge bill to cut the road and a spade to fill in cavities." They brought, however, the market to the very doors of the farmers and grain and coal, which during the 'seventies and 'nineties were carried on horse-back and four-wheeled wagons, began to be carried on trucks.

After 1815 the turnpike trusts began to be consolidated and combined into larger areas for which salaried surveyors and sub-surveyors began to be appointed by the larger trusts. This amalgamation revolutionised the methods of

finance and administration. The maintenance of roads and their repair became a profession of these surveyors who instituted a uniform system of improvement and maintenance of roads. The trusts were to get their share of statute labour or a money payment and the parishes were anxious to spend the money in employing the unemployed parish labour. But the surveyors did not encourage this and a regular labour force for road work came gradually into existence. Thus, through the turnpike trusts the main highways were rebuilt, maintained, repaired and extended but the larger part of the road mileage of the country under the parishes remained unimproved on account of their poor resources. "Bridges were in the hands of the county and paid for by a county rate, but roads were the affair of the parish, which appointed annually an unpaid parish officer as surveyor. For resources the surveyor of the parish roads depended on statute labour, or on the money commutation therefor, supplemented by pauper labour. Under this regime no improvements were effected; and traffic was greatly obstructed by the complicated regulations, the outcome of centuries of chaotic laws, which

limited the weight of loads and prescribed the patterns of wheels."⁸

The Highways Act of 1835 abolished the statute labour as also the regulations relating to the type of vehicles, and empowered each parish to levy a rate and appoint a salaried surveyor for road maintenance. In the first half of the last century appropriations by Parliament for highway construction became numerous and as a result of intensified efforts of local authorities and scientific methods of road construction the more thickly peopled parts were provided with adequate roads. In fact at the commencement of the Victorian era it seemed that the road construction would be continued by larger turnpike trusts to provide the country with trunk lines fed by numerous feeders from the parishes, but unfortunately for the trusts there came the calamity of the railways which revolutionised land transportation and traffic. With the railways catching the national imagination "*the roads slipped back under parochial control*". The turnpikes became bankrupt and the Government had to give up its *laissez faire* policy and to provide for the maintenance of the roads.

8. C. R. Fay: op. cit. p. 177-78.

Between 1865 and 1895 the turnpike trusts were gradually liquidated and they levied their last toll in 1895. In 1888 an Act transferred the main county roads to county councils and others to the rural and urban highway boards. This system of road administration has continued to the present day. The growing industrial and commercial towns with their augmented population and increased trade in the meantime had to look to the improvement of their streets and roads for the dual purpose of coping with increased vehicular heavy traffic and of improving sanitation and public health. With a view to this the streets and roads have been paved and asphalted since 1869 and many improvements have been effected to make the urban roads "less slippery, less noisy and less receptive of dirt". With the advent of the automobile and motor traffic the road engineers have been busy with evolving smooth and dustless roads. The coming of the automobile led to the passing of the Finance Act of 1909-10 which imposed taxation on motorists and motor spirit to provide funds for the widening and special improvements of the main roads of the country. A Central Road Improvement Board was also

constituted with powers to disburse this fund and make grants for improvements. This constituted a return from parochial to national control of roads and the transfer of their maintenance from the local tax-payers to the public exchequer. On account of its moderate resources this Board could do very little good work up to the War. During the Great War the improvement of the roads and bridges had been suspended and the road surface had been damaged on account of heavy traffic and therefore in 1918 the Government granted a special fund of £8½ m. for repairs and improvements to the road authorities and the Board was to provide a further sum of £2½ m. The Road Board was superseded by the newly created Ministry of Transport in 1919 and the Roads Act of 1920 instituted the Road Fund by an excise levy on mechanical vehicles in accordance with their horse-power, or seating capacity or empty weight and by licence fees from drivers and horse-drawn carriages. Since 1926 one-third of these has been paid into the Exchequer.

The Ministry of Transport classified the highways into class A and class B. The first refers to the arterial roads or main highways and the

second to the other roads. For the maintenance and improvements of roads and bridges grants are made to the road authorities. Since 1929 all county roads, *i.e.*, roads in the countryside and all A and B grade highways outside the metropolitan and county boroughs have been placed under county councils who receive 'block' grants. Of the approved cost of maintenance of A and B class roads 60 and 50 p.c. respectively are paid by the Ministry and in case of 'scheduled' roads only 25%. For improvements also the same percentage is ordinarily paid except when large schemes for relief of unemployment or transfer of roads from one class to another take place. For such relief work and new roads about £28 m. were also spent between 1921-1930 from the Road Fund. In 1929 there were 179,095 miles of metalled roads in Great Britain. The Ministry of Transport has not only centralised road administration and effected economies in it, but it has also made numerous notable improvements in the technique of surface, foundation, materials and alignment of roads, made new roads and routes, constructed new bridges and rebuilt the old ones. Since 1924 it has created a system of trunk roads as the main

arteries of national traffic and carried on researches in road engineering and a triennial census of motors for the execution of its policy. As pointed out by the Royal Transport Commission of 1930 the English roads were generally of tortuous alignment, of indifferent character and of infinite variety of width and gradient, but as a result of the Ministry's efforts the Commission averred "it would probably be no exaggeration to say that our roads are the best in the world."

The cut-throat competition between the omnibuses, lorries and trucks and the railways in the post-war years has given rise to the problems of rail-road competition and co-ordination. With a view to provide improved facilities to the motorists and efficient handling of traffic the Commission recommended the complete overhauling and reconstruction of several existing roads, the increasing of their width, construction of bypass roads, strengthening of weak bridges, improvement of road junctions and lines of sight, the progressive reconstruction of built roads and the freeing of toll roads and bridges. For organised road transport, and co-ordination they recommended the appointment of Traffic

Area Commissioners for licensing road hauliers for the carriage of goods and passengers on hire. In accordance with these recommendations the Road Traffic Act of 1930 was passed which divided Great Britain into 13 areas each under a body of 3 Traffic Area Commissioners. One of these commissioners is appointed by the Transport Minister to represent county councils from a panel of one nominated member from each county of the area, the other from a panel of nominated members representing boroughs and urban districts, and the third is selected by the Minister from the notable people of the area to act as chairman who is a wholetime officer. No commissioner should have any interest in any transport undertaking. While granting licences to public carriages and vehicles their safety, the suitability of the routes, the extent of service on them and the co-ordination of all forms of transport for passenger traffic in the area—all these points are taken into consideration.

Canals.

The grand period of road building in England coincided with the great period of canal construction (1760-1830). It was at the eve of the

Industrial Revolution that modern canal building with the help of aqueducts began to meet the demand for cheaper methods of moving coal from the collieries to the factories. "The improvement of roads was due to increased traffic while the canals certainly owed their origin to the fact that they would pay owing to the increasing demand for coal."⁸ During the period of the Revolution canals were the most important part of the inland transport system and one on which the growth and extension of the factory system depended. Beginning with the Bridgewater canal (7 miles) in 1761 built by J. Brindley from Worsley to Manchester to provide a better outlet to the products of the Duke of Bridgewater's collieries, a large number of canals were constructed in this period to give ready and cheap transportation for goods in all parts of the lands. They played a revolutionary role in the expansion of inland commerce. They were of most value in the flat country around Birmingham and in the low lands of Staffordshire, Cheshire and Lancashire. Far more than roads they opened and enlarged England's industrial hinterland. They carried

8. *Knowles*: Industrial and Commercial Revolutions.

coal cheaply; and, coal was the foodstuff of the industrial revolution.”⁹ The grand success of the Bridgewater canal encouraged Brindley to extend it from Manchester to the mouth of the Mersey at Runcorn but it was ultimately bought up by the Manchester Ship Canal (1894). Then the Grand Trunk canal (Trent and Mersey canal) which was authorised by Parliament in 1766 was opened in 1777 and was later connected with Birmingham canal. The Birmingham and Fazeley canals were joined in 1784 and came to be known as the Birmingham Navigations. The Parliament authorised in 1768 the Stafford and Worcester canal to connect Wolts-Verhampton with the Severn at Stourport. To remove the difficulty of navigation of the Severn between Gloucester and Berkley the Gloucester-Berkley ship canal was built in 1792-1827. Finally Brindley planned the Forth and Clyde canal (1767-1790) and the Leeds and Liverpool canal (1770-1777). The Thames Severn canal was opened in 1789. But they were not ship canals. The Manchester Ship canal was alone able to take large steamers.

As many of these canals linked up rivers, the

9. *G. R. Fay*: op. cit. p. 180.

rivers were also improved and these improved rivers were called "inland navigations". In the last decade of the 18th century there set in a great canal mania in England and therefore by the close of the century it was so rapidly covered with a system of inland waterways that "the country was better provided with canals than it had been with roads at the beginning." Nearly £5 m. had been spent on canal construction and a mileage of 3,101 (2600 England and Wales, 225 Scotland and 276 Ireland) had been reached.¹⁰ During the nineteenth century both road and canal engineers and builders complemented each other to the great advantage of industry, trade and travelling and by 1838 nearly all the important industrial and trade centres had been linked up in such a manner that no place south of Durham remained at a distance of more than 15 miles from a river, a canal or other waterway.* There were in 1830 no less than 1,927 miles of canals, 1,313 miles of navigations and 812 miles of open rivers in England and Wales, 183 miles of improved waterways and canals in Scotland and 848 miles in Ireland.†

10. *Pratt* quoted by *Ogg*. op. cit. p. 238.

**Ogg*.

†*Knowles*: *Industrial and Commercial Revolutions*.

Features :—“In method of financial promotion the canals resembled the railways which followed them: in the kind of service rendered they came closer to the turnpike trusts.”¹¹ The canals like the roads were chiefly built by private companies of shareholders with rights of way granted to them severally by Parliament. Unlike the continental canal system they received no financial grant or aid from the Government. Speculative investment brought in their capital outlay except the first canals which were built by individual manufacturers individually or collectively at their own expense, *e.g.*, the Bridgewater canal, the Trent and Mersey canal. After the grand success of the first canals manufacturers, merchants and farmers began to buy freely the shares of canal companies and their increased interest led to the famous boom in canal shares in 1792-93 culminating in the general financial collapse and ruining many helpless widows, orphans and clerks. Most of these canals were built to compete with roads and were therefore designed for small barges only. Moreover, the canal companies did not themselves carry goods: they “were not public

11. *C.R. Fay*: *op. cit.* p. 182.

carriers," but ran the canals for hire, i.e., any person on the payment of the necessary tolls could ply his own barge or boat in the canal. Finally, as the canals, like the roads, were built by many private companies they lacked uniformity in gauge, depth, tolls, finance and upkeep. Their tunnels were of different sizes, bridges of different heights and all of them were too small for steamer haulage and for modern needs. The earliest canals serving the industrial north midlands were financially great successes but those in the south midlands serving agricultural regions were unprofitable and financial failures. With the coming of the railways they became derelict.

*Effects :—*Despite their extreme heterogeneity the canals had many important economic effects. They fostered industry and trade everywhere and increased the population of towns. Freights were reduced by a quarter and bulky materials like coal and building materials got a new mobility. The potteries could now obtain China clay from Devon and Cornwall all the way by boat and, water transport being cheaper than land transport, they got an outlet for their export trade. The new impetus imparted to

the potteries turned a wild tract into an area covered with houses, villages and towns. The network of canals in the 'black country' studded the whole area with active coalpits, foundries and factories. Cheaper coal and improved facilities for importing raw materials from Liverpool greatly benefited Manchester. Manufactures and trades of all kinds were greatly stimulated in Yorkshire, Worcestershire and Somersetshire. Even the south of England—the bleak, miserable and nearly empty region—“was transformed into a rich arable country studded with villages within a few years.” The better distribution of foodstuffs led to improvements in agriculture and to the convenient feeding of the industrial north. A redistribution of population resulted from the movement of people from the vicinity of woods to the cities because of the development of coal mining. A good deal of coastal trade was diverted to the inland navigations and to cope with the increased traffic many new ports and docks were constructed. A new class of contractors and navigators sprang up and all communications were stimulated.

Decline:—After 1830 the introduction and

fast development of the railway radically transformed the inland transportation and eclipsed the canals as the principal means of internal communication. There were many causes of this decline. In the first place, the canal companies were not public carriers: they provided a way for others to use on the payment of the requisite tolls permitted by Parliament. Hence there were no through rates, no uniform size and unity of management. Secondly, the services rendered by the canal companies and private carriers were extremely defective and inefficient. Very high rates, unpunctuality, intemperance and incivility of their servants, maximum tolls, supplementary charges, inconsistency in the permanent way, diversity of size, gauge, width of locks and depth of bed and lack of a unified system were rampant. With the slackening of contact between canal owners and canal users many companies gave up the encouragement of local industry, resisted competition and imposed many unauthorised supplementary charges on various pretexts. The building of houses on either side of the canals in close proximity prevented their extension for steamer traffic. The coasting steamers by now had begun to

carry large quantities of goods and their greater speed, as compared to the sailing vessels, diverted the canal traffic to the coasting trade. But the chief cause of their decline were the railways which were compelled to buy out canals for building their lines. As pointed out by the Canals Committee of 1883 a 'creeping paralysis' fell upon the canals after 1840 due mainly to the railways. With their through traffic and rates, their speed, their capacity to handle large quantities of goods, their punctuality, their facilities for cartage and delivery at the terminals and civility of their officers and servants, the railways virtually killed the canals which stagnated and fell gradually into desuetude. Many strategic canals were absorbed by the railways and bought out by them. On account of heavy losses many canal owners were anxious to sell out. In this way between 1846 and 1873 the railways absorbed more than $\frac{1}{2}$ of the canals, most of which were central links joining different systems and this fact led to the starving and neglect of the outerparts so that the whole traffic might be diverted to the railway trucks. In several cases special legal rights with canal purchases were acquired by the railway companies to the

detriment of other canals, *e.g.*, "bar and compensation tolls" for permitting connections. Besides, the existence of the coal mines in the hilly north-west had necessitated many locks for sharp ascent or descent and this made the canal traffic very slow and expensive. On this account they were severely handicapped in competition against the railways. Finally, in the wake of the revolutions internal commerce had also been radically transformed and organised on a large scale. The railways with their speed, punctuality and warehouse facilities therefore suited it better than the canals. The coal merchant, for example, preferred the trucks because he could easily, quickly and cheaply replenish his stock, needed no warehouses and could work with smaller capital. The farmer also preferred the railway because it provided sheds for protecting corn, manures, etc. from the weather and could fetch it from the railway warehouse on his horse-cart at ease. The same was true of the trader and manufacturer.

The decline of the canals hit the public and independent canals. The Government tried to help the canals, maintain them against the ruthless competition of the railways but it was all in

vain. In 1845 to enable them to compete with the railways they were authorised to act as carriers and given facilities for through rates but it was too late. In 1873 a Railway and Canal Commission to scrutinise and prevent acquisition of canals by railways was appointed. Their further absorption by railways was prohibited without the previous sanction of the Railway Commission so that competition might be preserved and the railways would not develop into a monopoly. The success of the Manchester Ship Canal led to the Royal Canal Commission of 1909 which recommended an integration of management and a large scheme of improvements to provide trunk-line communications. But its prohibitive cost and an expected poor traffic prevented the Government from giving effect to the recommendations. Then the advent of the motor transport introduced an uncertainty and the scheme was finally given up.

The "canals then, like water power, were an episode" but served a useful purpose in their time and contributed substantially to the material prosperity and industrial predominance of England upto the third decade of the last century.

Between 1760 and 1846 they enriched the industrial hinterlands by giving a new mobility to coal, iron, stone and salt, relieved the road transport of this heavy traffic and complemented it. As the cost of canal haulage was never more than $\frac{1}{2}$ and generally ranged between $\frac{1}{4}$ and $\frac{1}{3}$ of the cost of land carriage, so the canals provided a cheaper form of transport and mobilised the paupers from the southern workhouses to northern factories in pre-railway days. "They helped to distribute population. They provided new factory sites, gave elbow-room for industrial expansion, and brought the factory workers outside the pestilential limits of old over-crowded towns. They offered a new field for the exercise of engineering talent, in building the canal works themselves—the basins, locks and aqueducts—in building bridges over them, and in the trial of the first iron barges and steamboats upon them. Their economic tragedy was that they could not make the transition from horse to steampower. They were built when engineering was in its infancy; and the houses and factories which they attracted to their banks made any scheme of general widening insuperably dear."¹²

12. *C. R. Fay*: *op. cit.* p. 186.

Railways.

With the growing population and expanding trade, industry and commerce the roads and canals outgrew their utility as means of transit and their place was taken by the railways. One of the most important features of the 19th century was the radical transformation of inland transportation by the development of the railways. The turnpikes and canals served the country well but roads were still few between 1820 and 1848, and travel by stage-coaches was inconvenient and costly; while the canals suffered from congestion of heavy traffic, high tolls and amalgamations. In the 17th century tramways had been introduced for the carriage of coal to short distances at the mines and the seaports and their success suggested the introduction of railways both for goods and passenger traffic as a cheaper, quicker, safer and more convenient means of transport.

Like the canals, it was coal that produced the railways, and the first rail roads were "colliery rail roads". These short railways with wooden and later on with cast iron rails (1767) in the coal areas were used for the conveyance of coal to the towns, river or canal sides:

and the wagons or cars were drawn by horses. The horse power was used on the level stretches and stationary engines on steeper slopes and here and there locomotives were being used as experiments. Between 1800 and 1820 about 25 railways of this kind with 5 to 10 or 20 miles distance obtained charters from the Parliament and began operations for general freight. In 1803 an iron tramway between Croydon and Wandsworth was opened for general use on payment of tolls but it was not until 1825 that the remarkable advantages of steam-driven iron-railways had been established. George Stephenson constructed a locomotive capable of drawing 30 tons of coal at 4 miles an hour in 1814 but the real revolution in inland transport began only when he completed the "Puffing Billy" and the "Rocket" in 1825 and 1830 respectively.

^{1}Features of English railways :—*The railways, like the canals and the turnpikes, were private enterprizes. They owed nothing to state aid and lacked a uniform national system. They were moreover not built for military and strategic reasons but for commercial purposes. The

1. Knowles: Industrial and Commercial Revolutions.*

absence of state aid was due to the prevalence of *laissez faire*, to the idea of the Government to have competition in the interests of the consumers and to the accumulation of capital and traffic seeking an outlet. The promoters of the railways had also the improvement of their districts and profit as their immediate objective. Like the canal companies the railways were first expected to lay out the lines and then allow individuals and firms to run their private cars or wagons on them on payment of tolls which would compensate the railway companies. The Government therefore provided in the early charters of railways that they would be open to all private vehicles on payment of tolls. Therefore a large part of the English railway equipment consists of private wagons although private engines have disappeared. In 1913, 786,516 wagons were owned by British railways and 780,200 by private traders. This system prevented an efficient working and it was soon realised that a railway was successful only as a monopoly in which the track and trucks, etc. were both owned and operated by the same company. A Committee of Parliament in 1839 pronounced itself definitely against the original plan.

A second feature of the English railways has been the devoted opposition of the general public, of the universities, of vested interests like the canals and the turnpike trusts, landlords and town corporations, etc. to their construction and development. They were looked upon as dangerous innovations and a regular propaganda was carried on against them. To overcome this general resistance the railways had to pay heavily in legal expenses and promotion. The third feature of the English railways therefore is their heavy cost—£4,000 to £8,000 per mile. In addition to public opposition, the competition of the canals, high costs of land, initial expenses of the experimental stage and geographical factors and greater expenditure for the sake of solidarity have made them the most highly capitalised railway system of the world. They are the most costly and their per mile capitalisation in the pre-war period was thrice that of the German railways. They serve the country at high expense and return to the shareholders and State much less profits. The fourth feature of the English railways is their peculiar system of rates. Their rate charges consist of a toll for the use of the land, a charge for haulage, a charge:

for the wagon, a charge for collection and delivery, a charge for loading and unloading, covering and uncovering and a charge for the use of the station.

History:—For the sake of convenience the historical development of railways may be divided into six periods. The first period begins from 1821 and ends in 1844 and may be styled as the era of experiments. The period began with the grant of a charter for the construction of a railroad between Stockton and Darlington in 1821 and in 1823 a supplementary measure authorised the experiment of using steam-power. The 25 miles long road was opened for both goods and passenger traffic in 1825. Its greater devotion to passenger traffic was the only new feature otherwise the road was used by horse coaches at 7 to 9 miles an hour speed with two stationary engines to draw the cars up inclines. In that year, however, George Stephenson, the engineer of the line, succeeded in the use of locomotive engines and it was in September of the same year that “an engine driven by Stephenson and hauling a train of 34 little cars, covered the distance between the two terminals, preceded by a signalman on horse-

back, at the rate of some ten or twelve miles an hour.”² This was the beginning of the modern railways for freight only. Many short railroads followed it, but it was not till 1830 that locomotives were used regularly for all traffic by the Liverpool and Manchester Railway. This line was 30 miles long and was the first line planned definitely for passenger traffic. It was moreover the Lancashire cotton industry and not coal which led to its inauguration and completion. The heavy goods traffic between these two centres was entirely dependent on canal and roads and was very badly hampered by “ice in winter and low water in summer, and by the lack of interest and enterprise of the canal turnpike proprietors”. The carriage of goods from Manchester and Liverpool took a longer time than the carriage from Liverpool to New York and the textile factories in Manchester had to close down often for want of cotton which remained piled up in the docks. In 1824, therefore, it was resolved to build a rail road, to raise capital by subscription, and to obtain a charter. George Stephenson was appointed engineer, the capital was easily subscribed but the

2. *Ogg: op. cit.* p. 230.

charter was obtained after a long time on account of an organised opposition from the vested interests and conservative, ignorant and captious public to the use of locomotives and the doubt of the directors of the company as to the practicability and desirability of using locomotives. After many experiments a competition was organised in 1829 at Liverpool and Stephenson's "Rocket" with $12\frac{1}{2}$ tons of load and at a speed of 29 miles per hour won the prize. The line was opened in September 1830 and 6 trains a day began to ply regularly at an average speed of 18 miles and average passenger fare of about 7 cents a mile. The company paid 8% dividend in the first year. The speed was increased and the fare reduced later on.³

The engineering success of this line, its heavy and profitable traffic, its speed and cheapness, its comfort and convenience in travelling, etc. and the remunerative dividends to the shareholders inaugurated an era of rapid extension of railways. Rapid surveys for new railroads were undertaken and every year new applications for charters of new lines were presented to Parliament. Besides the building of small lines

3. *Cheyney*: op. cit. p. 211.

for the carriage of heavy goods the main trunk lines radiating from London were laid out within 4 or 5 years between 1833 and 1837. In 1836 alone no less than 29 new railway companies were granted charters for building 1,000 miles of track and in 1838 the London-Birmingham, 112 miles long was constructed. Throughout England and Wales there were 490 miles of railways and 50 miles in Scotland and they cost £13.3 m. They were also entrusted with mails. By 1843 there were 71 railroads with an average length of less than 30 miles, competition was very keen and the construction of new roads was the main problem. Despite a commercial depression which temporarily checked investments, this rapid extension was maintained and culminated in 1845 in the "railway mania." With the lifting of the depression, a large quantity of capital sought investment and the profitability of the railways led to a wild speculation in railway stocks. In 1845 no less than 270 bills chartered new railroads for constructing 4,538 miles of track. The shares of new companies were sold at ever-rising premia even before they were built. "A frenzy seized the stock markets and thousands of men not only removed their

savings from other places but bound themselves to payments far beyond any funds in their actual control. Men grew rich overnight by the rise of the price of shares they had not yet paid for in companies whose rights of way were not yet surveyed."⁴ This was followed by an inevitable crash in October 1845 when the Bank of England changed its rate of interest. Many failures, fall in price of shares, prosecutions and bankruptcies became rampant and thousands of men and families were ruined and buried in debts. "Several men committed suicide, others fled to the continent, still others were placed in debtors' prisons." The difficulty caused by the banking crisis was accentuated by bad harvests in England and the Irish potato famine. The development of railways after this was therefore slow.

By the time of this boom the English railways entered upon the second period of their development which was characterised by *experiments in operation, the consolidation of the lines into great trunk systems and the disappearance of the canals as their competitors*. The great era of amalgamation and consolidation was started in 1844 by George Hudson, the well-known "Railway King" who

4. Cheyney: op. cit. p. 213.

was instrumental in starting many small companies in the north and in their extension and amalgamation. The disadvantages of the haphazard development of railways in an age of individualism and *laissez faire* and without any regulation or control led to the movement towards consolidation of the detached and separate railroads into one system or group by purchase or lease or by merger and amalgamation. The necessity of through traffic and efficiency and financial economy attendant on such combinations also acted in the same direction. The separate railroads moreover wanted to be powerful both for offence and defence against their rivals and the bigger ones to guard their territory against intrusion and to occupy neutral territory. Finally, the institution of the Clearing House in 1842 by the railways of their own accord brought them into closer business and personal contact and promoted private understandings to eliminate competition. It has been established to facilitate through traffic and to adjust the amounts to be paid in each case for the portion of the line used in such traffic. But every act of combination required a parliamentary sanction and gave rise to scandals, illegalities

and irregularities. Hudson utilised his great powers of organisation and skill in finance and management to the development of a large number of consolidations. Being the chairman of the boards of directors of many railways he wielded great influence and attracted vast quantities of capital for investments in railways. When the speculation mania in 1845 was at its zenith he succeeded in getting the consent of 40 bodies of shareholders within two days for amalgamations involving a sum of £10 m. With the coming of the panic and the crisis in 1847 he fell into public disfavour, was condemned outright and criticised very severely for many covert acts of questionable legality and misappropriation of funds in 1849 and was compelled to go abroad. Between 1844 and 1847 some 637 separate railroads were chartered with an authorised length of 9,400⁵ miles. By 1848 some 12,000 miles had been chartered and more than 5,000 miles opened; there were 71 railroads in use with an annual passenger traffic of 25 m.⁶

With the evergrowing mileage and amalga-

5. *Hadley*: Railroad Transportation. p. 167,

6. *Cheyney*: op. cit. p. 212.

mations several improvements in construction and working, rates and services were effected to attract more and new traffic. Classification of goods and rates was made scientific and greater economy in operation and efficiency in carriage of heavy goods over long distances at remunerative rates were achieved. The railways established their commercial superiority to the canals by the second half of the last century on account of their through rates, punctuality, regularity and speed in delivery as common carriers and began to undercut the canals. The railway traffic began to surpass the canals which, in spite of Government's desire to maintain them, dwindled into insignificance and decayed. The railways had proved their worth and utility beyond doubt, developed and served commercial traffic efficiently and cheaply and augmented the national wealth and resources of the country. Public opinion now turned in favour of the railways which now took up both passenger and goods traffic at cheaper rates and rendered the canals unremunerative. This growing transport monopoly of the railways was viewed with horror by the Government and they began to control them systematically to

maintain competition for carriage of goods and passengers in the interest of the consumers. In spite of this, however, the new construction and consolidation of the existing roads went on together with but little government control till 1872. In spite of a number of committees' and commissions' reports on construction, working and amalgamation of railways there had not been devised any satisfactory device of maintaining effective competition between the railways in the matter of service facilities, and regulation of their rates and charges.

In the third period of the railway history (1873-93) the most outstanding event was the systematic regulation and control of railways by the State. The period coincided with the Great Depression which hit hard agriculture, shipping, iron and steel and cotton industries and prompted a reaction against *laissez faire*. The railways in themselves compelled the Government to give up its traditional policy and it was reflected practically in all spheres of life. The rapid progress of amalgamation, and the consequent fear of transport monopoly and the policy of discrimination by the railways in rates both as regards individuals and districts. There

was an outcry against such preferences, against unequal mileage rates, and it was also alleged that the railways carried goods cheaper for foreigners than for Englishmen. As a result of all this a national Railway Commission was set up in the first instance for five years "to report on proposals for the further absorption of canals by railways and to act as a court of appeal for aggrieved traders. In 1888, its powers were strengthened, and it was renamed the Railway and Canal Commission, but by this date canal amalgamation was a dead issue."⁷ The Commission consisted of 3 men including one Judge and a railway expert, and was entrusted with the hearing of complaints about preferences and with the decision of the question if the through rates were fair and reasonable, with the examination and prevention of schemes of amalgamations and working agreements of railways and with the investigation and adjudication upon all proposals of the railways to buy up canals. It was further empowered to settle dispute between railways and to compel them to publish their tables of rates and to decide upon the fairness and propriety of their terminal charges.⁸ Some of the

7. *G. R. Fay*: op. cit. p. 204.

8. *Knowles*: op. cit.

powers of the Board of Trade were also given to it and it was especially appointed to supervise and enforce the Railway and Canal Traffic Act of 1854 which protected the trader and ordered the railways to provide facilities to the public and render reasonable service, to accept and forward through traffic and prevented undue preferences. It was, however, not a strong body, its functions were very wide and difficult but the powers were limited and inadequate. In the words of *Hadley* "it has power enough to annoy the railroads but not power enough to help the public efficiently."⁹ The powers and privileges of the railways granted in their charters could not be revised, nor its orders could be enforced on them. They had no standard rates to judge the fairness of the railway rates and the process of complaints and decisions was costly and difficult and caused irritation and displeasure. In spite of these drawbacks its very existence was a check upon arbitrary action of the railways in granting concessional rates or preferences to individuals and districts and it made the State control a reality. Soon after its creation individual preferences ceased and rail-

ways acquired very few canals; its success led to further increase of State control. In fact, its establishment marked 'a new era'¹⁰.

The complaints against inequality of mileage rates and preference to foreigners still continued and the depression and low prices made the rates look higher and therefore an all-round reduction of rates was demanded. The railways, however, increased the rates to provide improved terminal facilities and better services. A Committee therefore was appointed in 1880 to investigate into the mileage rates and report. As a result of its recommendations the *Railway and Canal Traffic Act of 1888* was passed which required the railways to prepare new schedules of maximum rates and fresh classification of goods with a view to simplify the rates and introduce uniformity in place of complexity and anomalies. The railways were given six months to prepare and submit these revised rates to the public for discussion and criticism before they were approved by the Parliament. Different rates for domestic and foreign goods of the same kind were prohibited as also the hire charges for short hauls as against longer runs on the same route.

The Act made the Railway and Canal Commission a permanent body, enlarged its powers and cheapened the process of making complaints. It also prepared the way for a revision of the whole system of charging rates. By 1893 the maximum rates thus prepared and approved by the Parliament were made law for all kinds of goods. This process of fixing of maximum rates was epoch-making because it meant the repudiation of *laissez faire* for securing fair rates to the traders and the inauguration of a policy of restricting monopoly profit in the interest of commerce. The State had hitherto limited its activities in the control of industry to the fixing of hours of work for women and children and to seeing that wages agreed on were paid regularly and properly. Now it began to fix prices of services.

The Acts of 1889 and 1893 had been passed to meet the demands of the traders for lower rates in view of the depression and falling prices of the 80's. The various acts of incorporation of the railway companies had fixed maximum tolls for the use of their roads as also maximum total rates for complete service by a combination of the tolls and charges for the use of the rolling

stock and locomotive power¹¹. But by the '80's nearly all the companies were carrying traffic at rates much lower than the stipulated maximum rates. When the new schedules were compiled and became law by January 1, 1893, the railways raised their special rates, at which they carried a great part of their traffic, to the new maxima allowed by the Board of Trade. This was contrary to the intention of the Parliament and the desire of the traders; a hue and cry was raised against them and a fresh inquiry by a Parliamentary Committee led to the passing of the Act of 1894 which converted the rates actually in force in 1892 into the maxima and any reasonable increase in them was made dependent upon the rise in the cost of service rendered to the satisfaction of the Railway Commission. The Commission thus became a great rate-controlling body but as the rates could neither be increased nor lowered the Act of 1894 "killed any competition in rates that might have developed".¹² The railways feared a reduction in rates because, if once reduced to attract more traffic, they could not be increased if necessary without the previous sanction of the Railway and Canal

11. *G. R. Fay*: *Op. cit.* p. 204. 12. *Knowles*.

Commission. This difficulty in revision of rates checked economies in management as also the undercutting of rivals and thus killed all competition in fares and freights which the Government railway policy had in view. The result was a competition after 1894 in granting more and more facilities and comforts to the traders and the travelling public by employing more rolling stock, more comfortable carriages, fast trains with long non-stop runs, restaurant cars, and introducing week-end and excursion and holiday concessions. Wages had also to be increased and higher rates and taxes to be paid. All these improved facilities meant heavy expenses. Even small consignments and more favourable classification of goods were encouraged to attract traders. The railways were thus confronted with two difficulties: a rigid fixation of rates and a persistent heavy expenditure on operation due mainly to increased coal and labour bills. Failing to raise fares and freights to meet the increasing costs the railway took to amalgamation and working agreements as the only way out of the woods. Such working alliance eliminated competitive waste and brought economy of management.

Thus, began the *fourth period* of English railway history after 1894 which up to the outbreak of the Great War in 1914 was characterised by an approach to the nationalisation of railways. The amalgamation of the various lines into large trunk systems, which followed the fierce competition of railways in catering for goods and passenger traffic by the offer of improved facilities, concessions and comforts to increase their revenue, was not favoured by the Parliament. Therefore, the railways entered into working arrangements which the Parliament could not prevent and thus secured indirectly all the advantages of amalgamations. In 1908 the London and North-Western and the Lancashire and Yorkshire and in 1909 the Great Northern, the Great Eastern and the Great Central entered into such agreements. Railway stocks had been falling and it was feared that rates would be increased, therefore, public opinion favoured these agreements because they led to economy in management and avoidance of unnecessary duplication. An official inquiry into amalgamations in 1911 revealed that working agreements were very common, that inter-railway competition for traffic in the interest

of the traders was not existing and witnesses on behalf of traders recognised that this could not be prevented. "The era of competition between railway companies was passing away."¹³

There was, however, an outcry and agitation against amalgamations among railway employees who were afraid of reduction of posts and of lesser prospects of promotion which followed in the wake of these mergers. Amalgamation reduced the number of booking offices, the number of the employees, and blocked promotion by diminishing the number of posts. The employees also maintained that they were specialised workers and could not be easily absorbed in other industries. This led to labour troubles and to the development of trade unionism among railway men from 1871 but even upto 1892 only one in seven of the railway workers was enrolled in a union. In 1893 after a strike the Board of Trade was authorised to inquire and fix reasonable limits to hours of work for adult male workers even in a relatively safe industry like railway. "This shows how railways contributed another stone to the edifice of State control." The railway employees demanded

an 8 hours' day and a 2s. advance in wages in 1897, on the refusal of which by the railway companies, a strike was organised in the Taff Vale Railway and led to the famous Taff Vale decision that union funds were liable for unlawful acts of unionists. This seriously discouraged strikers and it was only in 1906 that on the agitation of the union leaders in general the Trade Disputes Act made the union funds immune from such liability. The railway companies still refused to recognise the unions, which continued the fight for improvement of the conditions of all grades. When a strike was imminent in 1907 the Board of Trade intervened and persuaded the railway companies to the setting up of Conciliation Boards consisting of both railways' and workers' representatives for settlement of disputes re: wages or hours, etc. No unionist other than a railway employee could sit on these boards. Any dispute was to go first to the department concerned, then to the central conciliation board, and if unsettled even then, then it was to be referred to arbitrators appointed with mutual consent of the parties or by Speaker of the House of Commons or the Master of the Rolls. The working of these conciliation boards

was extremely unsatisfactory, vexatious delays and disappointing awards caused heart-burnings and the railways still refused to recognise the trade unions although they had secured legal recognition in 1907. But the conciliation boards served the railway labour unions well in one sense: the joint action of all railway workers in general on these boards led to amalgamation of all railwaymen—a movement which paralleled the amalgamation of the railway companies. The railway labour unions called a general strike in 1911 which was settled only after Government intervention and after important wage concessions were made by the companies. The scheme of conciliation boards was amended. A more elaborate and uniform system of maintaining accounts by the railways was prescribed by the Parliament. The railway labour unions, excepting the Locomotive Engineers' Society and the Association of Firemen and Railway clerks, amalgamated into the National Union of Railwaymen in 1913 including all railway employees of all grades and began to agitate for a share in railway management and for their nationalisation. Meanwhile the railways demanded permission from Parliament to raise

their rates beyond the limits of 1892 to cover their increased expenses in improvements effected in every field and in wages. This right was conceded to them by the Railway and Canal Traffic Act of 1913.

The third notable event of this period in railway history was the proposal to develop new canals as competitors of railways. The increased rates by railways in July 1913 encouraged an agitation for the revival and development of canals as rivals of the railways to combat their growing monopoly. Usual arguments for and against canals were stressed but such controversy did not avail. A Royal Commission appointed in 1906 to investigate the problem reported in 1909 and recommended that the entire canal system (4,673 miles in 1914 in England, Wales, Scotland and Ireland) should be purchased by the State at a cost of about £6,000,000.¹⁴ It also recommended that the canals between Hull and Bristol and London and Liverpool should be taken and deepened by the Government, for the passage of 100-ton barges to carry bulky goods like coal, lime and ore, etc. It would also relieve overcrowding of seaports and towns near the sea

14. *Ogg: op. cit.* p. 234.

where the factories were shifting to get raw materials and do away with the loss occasioned by such shiftings. The railways opposed such a move on the ground of cost and unfairness to other parts of the country and pointed out that motors and coastal steamers were already competing seriously with them for short distance traffic. Moreover the traders in England required facilities for cheap and quick carriage of small parcels to short distances and this problem could not be solved by canal development. No action was taken on the report of the Commission and the growing monopoly of the railways remained unabated and unchecked. The canals suffered dereliction. Finally, the difficulty of devising any suitable scheme of State control and the growing pressure of the railway employees brought the question of the State acquisition and ownership of railways to the forefront and while the controversy was raging at its height the Great War broke out and the railways passed into State control temporarily and as the result of further concessions in wages and 8-hour day they suffered from financial insolvency when the control was removed after the war.

The War and Post-War developments com-

prise the *fifth period* in the history of English railways. The day after the declaration of war the railways were taken over for military reasons by the Government and worked as a State enterprise during the hostilities. A Committee of railway managers with the President of the Board of Trade as Chairman was set up to work the lines as one unit or system. The companies continued to operate their lines but their receipts were taken by the Government which met their expenses and returned the net income earned by them in 1913 every year. That is to say, the railways got compensation equivalent to a difference between their proceeds under State control and their net receipts in the year 1913. Traffic and rolling stock were pooled to eliminate wasteful competition, fares were considerably increased and restrictions were imposed on speed and non-military traffic and certain conveniences and comforts of passengers. Difficulty of carrying out repairs caused a deterioration of equipment and stock. Locomotives had to use in certain cases inferior grades of fuel and the permanent ways had to bear the burden of hauling at maximum speed heavy war materials and machinery for export to the continental theatres

of war. A number of economies had been effected, specially in the use of wagons, on account of unified management; but the most notable economy emanated from the division of Great Britain in 1917 into 20 transportation areas which facilitated the carriage of coal from one area to another by the main trunk lines. Railways were often threatened by labour troubles which were averted by grant of bonuses. In 1917 a strike for an '8 hours' day was threatened but was eased by the Government promise to reduce the hours of work suitably after the war. The railways stood the war time pressure of traffic very well but suffered very badly from its effects. They had to release 30% of their personnel and large quantities of materials for war service and munitions factories to construct special vehicles for the haulage of heavy war materials and guns, etc., and to manufacture shells and ammunition in railway workshops. By the close of the war they required a complete overhaul.

The outstanding problems confronting them were the removal of the evil effects of forced neglect of repairs and maintenance, reorganisation of the personnel, settlement of claims with the Government for war services and their

future organisation and management. The Government control was continued up to 1921 and an acute political and economic controversy raged in the country as to the private vs. State management and ownership of railroads. The Labour Party with a large public support outside the ranks of labour demanded nationalisation of railways on the grounds of increased Government revenue, more efficient and economical management under co-ordinated control, better wages and conditions of employment to the workers and greater advantages and economies in the interests of the general public by a co-ordination of all forms of transport. The scheme of nationalisation was hotly opposed by vested interests who cited the examples of other countries and argued that State railways usually work at a loss, they do not provide more efficient service, dislocate the money market by heavy borrowings, cause increased taxation to wipe out deficits in working, wage increases under State-management would eat up economies and labour troubles would be more acute and widespread. The oppositionists triumphed in the end and in 1921 the railways were returned to the companies with a sum of

£60 m. "partly as payment for arrears of maintenance for which the Government was responsible, but partly as a free grant to help them over their difficulties during a period of reconstruction."¹⁵

The economies resulting from co-ordination and unified management under State control were too real and substantial to permit the relapse of the railways into isolated and small competing units. Therefore their return to the companies in 1921 after de-control was accompanied by many far-reaching changes in organisation and operation with a view to tighten the State regulation of railways to a much greater extent than had been the case prior to 1914. *The Railway Act* 1921 embodying these changes brought about a compulsory amalgamation of all English and Welsh railways (120 in all) into four great trunk systems: the Great Western; the London, Midland and Scottish; the London and North Eastern; and the Southern. The old system of regulating charges was scrapped, the rate schedules were simplified, and laws and regulations for control of railways since their construction were consolidated. *A Railway*

15. Sir W. M. Acworth quoted by C. R. Fay op. cit. p. 205.

Road Tribunal "of three experts was set up to fix and vary rates and fares without being bound by the old statutory maxima. The rates and charges thus fixed by the Tribunal were to produce a *standard revenue* for each group: the standard revenue being the total net receipts of all the companies grouped in 1913. In other words, the rates and charges were to be fixed and adjusted in such a manner as to yield to each amalgamated company an annual net revenue equal to the aggregate net revenue of its constituents and subsidiary companies in 1913. On the average the rates were 50% higher than ten years before. This principle was adopted to enable the railways to meet a growingly dangerous competition from motor transport and coastwise shipping. A new classification of goods was laid down and changes in rates and fares were to be referred to the Minister of Transport whose powers were defined and those of the Railway and Canal Commission were increased. A new machinery with public representation for handling labour disputes by conciliation was evolved and for the determination of national wage rates for railway employees a Central Wages Board and a National Wages Board were

established. The first consists of 6 representatives of railway companies and 6 representatives of employees and the second, a tribunal of final appeal, consists of these 12 men and 4 representatives of the public and an independent chairman. But its award was not to be legally binding. The Railways could no longer exploit the employees or the public.

The railways were able to attain their pre-war standard of efficiency by 1923 but the extension in their mileage since 1913 was meagre and no less than 3,000 motor transport companies were competing with them in that year. The mergers of 1921 enabled the railways to have a number of economies of co-ordinated management and to offer better facilities and concessions and maintain systematic records. It eliminated wasteful competition. But the post-war depression hitting very hard the heavy metallurgical industries and coal dwindled traffic on railways. In 1925 "iron and steel traffic dwindled away and there was a drop of 5 m. tons in coal for each railway except the Southern. Out of a total loss of 13,650,000 passengers workmen accounted for 6,200,000." At the top of all this the motor competition in a country of short

hauls became very acute and the railways lost much of their first-class passenger traffic and some of their express freight traffic to the roads. The competition between railways and motors became cut-throat and the railways began to run local bus services but it could not avail. As Professor C. R. Fay points out it is not possible for the railways to find financial salvation in entering generally into local bus services in places where the competition is already cut-throat. "But the railways have straight and well-laid routes over which no private cars can ply, and they may find it possible to adapt their trunk line service to the new road users, perhaps by the entrainment of motor lorries in special carrier trains. By this method they could combine bulk carriage with the avoidance of transshipment and delays. Some alleviation may be gained by the adjustment of tax burdens, but this is not fundamental; and it is by no means proven that as property owners the railway companies are overtaxed or that the motor industry manufacturers and users contribute less than their fair share to the upkeep of roads."* Moreover it is to be remembered

*C. R. Fay: op. cit. p. 207.

that the development of road transport has also benefited the railways directly and indirectly. The railways have gained directly from the heavy traffic in road materials like stone, tar, pitch, gravel, sand, motor spirit and oils, and indirectly from an increase in their 'catchment' areas due to the buses and lorries which bring passengers from distant and out of the way places to the railway stations and induce them to travel by railways. As Davenport points out where the horse van could collect from ten miles round, the motor van can collect from thirty.

The new railway system envisaged by the Act of 1921 came into operation in 1928 and in the same year a Royal Commission was appointed to inquire into the rail-road competition and to suggest a scheme of co-ordination of all forms of inland transport. While the Commission was still deliberating the economic blizzard of 1929-30 hit the railways very hard and created new problems. The railways put forth before the Commission their considered views and their economic and financial disabilities caused by the road competition and the acute trade depression. They wanted exemption from the Passenger Duty, greater powers to compete with

motors and greater freedom to regulate their charges. Their exemption from the Pass Duty came in 1929 and they had been granted powers to run road services in 1928 and invested large quantities of capital in acquiring the existing road transport companies. In 1931 the railways imposed a 5% cut on all salaries and wages above £2 a week and of $2\frac{1}{2}\%$ on those less than £2 a week. There were about 6,00,000 men employed on railways, whose wages and conditions of work were regulated by the National Wages Board.

The Depression and Post-depression period constitutes the sixth land-mark in English railway history. The Royal Commission reported in 1930. Its main findings and recommendations were: that the geographical basis of grouping under the Act of 1921 was unsatisfactory and unbalanced probably because of the survival of joint lines, and therefore it recommended the pooling of traffic at junctions and the merger of joint lines. The acquiring of road services by railways was not favoured by the Commission which warned the railways in their own interests against the starvation of road services although it would promote co-ordination between road

and rail transport. Road transport was bound to affect the railways adversely. It further stated that unlike the past the needs of the public should be properly studied and those of the traders adequately provided; passenger fares should be revised and greater facilities like ensuring seats at junctions to all passengers should be provided and for short travels services should be speeded. Finally, it recommended electrification of all heavily trafficked suburban railways which would reduce the operating costs by $\frac{2}{3}$ and enable them to compete with buses more effectively, besides many technical recommendations for the improvement of their efficiency as goods carriers.

The Government came to the rescue of the railways in the slough of depression and passed a number of important measures to finance their improvements and extensions and to co-ordinate rail-road services on a permanent and equitable basis. The London Passenger Transport Board was set up in 1933 to co-ordinate, improve and work all passenger traffic by road and rail within the London suburban area. Area Traffic Commissioners were appointed to license public service vehicles on roads and to supervise arrange-

ments of passenger fares, routes and time-tables in each of the 13 areas to co-ordinate transport facilities.* By 1936 the railways had sunk £13 m. in road transport. The London Electric Transport Finance Corporation was established in 1935 to borrow under Government guarantee £32 m. at $2\frac{1}{2}\%$ at 97 and in 1937 to raise another £10 m. at $92\frac{1}{2}$ for lending at favourable rates to the London Passenger Transport Board and two other railways for electrification of suburban railways. Similarly the Railway Finance Corporation borrowed £27 m. at 97 under State guarantee for lending to the railway companies or construction and extension of their permanent ways, rebuilding of stations and electrification. These improvements under the State help scheme to the railways increased their revenue-earning capacities and their business. The net return on capital outlays increased from $2\frac{1}{2}\%$ in 1932 to $3\frac{1}{4}\%$ in 1936. By 1937 out of over 20,000 miles of railways 650 miles had been electrified.

Besides these, many facilities and concessions had been made for passenger traffic *e.g.* in 1933 the railways instituted the "summer ticket" for a month at the rate of 1*d.* a mile. In that year

*See ante p. 419.

they were also granted more freedom to determine their charges for exceptional traffic and competitive traffic was pooled. In 1937 the Railway Rates Tribunal allowed an increase of 5% in all fares and freights and the cut in salaries and wages which had been halved in 1934 was restored fully.

Although the Royal Commission thought that a complete co-ordination would lead to coercion of private interests and was hence desirable, yet they had recommended the appointment of a permanent Transport Advisory Council for a study of all transport problems and for advising the Minister of Transport for the promotion of co-ordination, improvement and development of transport facilities in general. The Ministry of Transport could guide and assist co-ordination by studying the general trend of transport developments. The co-ordination of passenger traffic was to be effected by the T. A. Commissioners and that of goods traffic by the T.A. Council of 12 members with plenary powers. The Commission did not make any recommendation for the nationalisation of all forms of transport although it showed its leaning towards such a step. They were opposed to it

on the grounds of political controversy which it would cause and on account of its impracticability. They were opposed to any scheme of combination of State purchase and company management. The Road and Rail Traffic Act of 1933 gave effect to these recommendations and the T.A. Council was set up for advice and assistance to the Transport Minister in matters of co-ordination, etc.

In 1937 as a first step towards the greatest possible degree of co-ordination the Council declared itself in favour of fair competition between alternative forms of transport with equality of wages and stability of rates. As the railway rates and wages were already controlled and regulated they recommended the same kind of control and regulation of road transport after which both road and railway interests were to agree voluntarily to regulate charges for their services. Accordingly the Baillie Committee was appointed which in its report drew up a scheme for regulation of wages in road haulage business and stabilisation of road rates. The Minister of Transport was to appoint for each traffic area an Area Rates Officer who would enforce the rates fixed by statutory committees.

of the hauliers of that area. A Central Road Rates Tribunal representing trades and industry as an appellate authority was to be set up to co-ordinate the activities of the Area Committees. The Area Rates Officers and the Road Rates Tribunal were to be accessible to the traders and licences were to be given by the Area Rates Officer with obligation to charge the fixed rates which were to be revoked in case of wilful and persistent breach of this obligation. Road Rates were to be published and kept open for inspection and wages and hours of work on the road transport were to be regulated. The Baillie Report had been criticised on the ground of absence of trades representatives from Area Committees, difficulty of agreement between rail and road transport services and the readjustments of the road and rail rates by the private agreements of the parties concerned. Railway freights are *ad valorem* while the road rates are not so fixed and hence there is a diversion of such traffic from rail to the roads and this is the gravamen of the charge of the railways against road transport agencies. No real co-ordination between them is possible unless their rates are based on the same principles. Any agreements.

in the absence of this fundamental will only stabilise differences, avoid unnecessary competition. There would be two rates for the same service and an arbitrary distribution of traffic. "The fundamental issue to be decided is whether transport charges as a whole are to be classified by value or not. With that question answered, schemes of true 'co-ordination' can then be evolved."*

The present war† has once again brought the railways under the complete control of the Government and the Ministries of Transport and Shipping have been merged with the Ministry of War Communications with Mr. Leathers at its head, and it has been suggested that civil aviation, which bids fair to become an important means of transport in post-war Britain, should also be transferred to the Ministry of War Communications. The control and regulation of railway rates and fares, the haulage of heavy war materials and ammunition have curtailed facilities and improvements for the benefit of passengers and traders and so long as the war lasts the repairs, renewals and extensions shall be in abeyance.

*Gilbert Walker.

†See ante p. 297.

CHAPTER XX

TRANSPORT (continued)

Growth of Shipping

We have seen in an earlier chapter how the rulers of England during the 15th and the 16th centuries encouraged ship-building with a view to strengthen trade and enterprise and to have colonies. The export or import of merchandise was restricted to English vessels and fisheries were encouraged to increase sea-faring. During the reign of Henry VIII began the creation of that sea-power on which a colonial empire ultimately depends. For almost 38 years through his untiring efforts he made the English navy a more effective fighting instrument and the most powerful navy in the world. With the defeat of the Spanish Armada in 1588 the English mercantile marine became supreme. The sixteenth century witnessed a commercial and geographical revolution. When the Turkish conquests blocked the caravan routes to the Orient, a new and unprecedented zest for exploration and discovery of new lands and new routes led to an impetus to international com-

merce and shipping which assumed an importance and dimension unknown before. England with other countries of western Europe entered upon a commercial conflict which persisted for three centuries and ultimately led to the transference of maritime supremacy to her.

During the Tudor period national interests centered round shipping. Bounties were paid on ship-building and a number of measures were adopted to ensure the supplies of necessary materials. The indiscriminate cutting down of even private timber was stopped; exportation of barrels and boards was limited and timber for fuel for the iron trade was not allowed to be felled within a fixed distance from the coast. The selling of English ships to foreigners was strictly prohibited and the cultivation of flax and hemp for the supply of sails cloth and cordage was encouraged. Harbours were repaired and improved and coastal piracy was severely put down. Then, the fishing industry, providing employment and furnishing fishermen^a as natural recruits for manning the ships of war in perilous times, was also encouraged by increasing home consumption, by the compulsory revival of the former Catholic fish days each week and by the

rigid enforcement of measures relating to it. The important effects of long distance voyages on the development of maritime power were also considered and daring sea-farers were encouraged to go on expeditions or explorations. The development of English enterprise towards the close of the 15th century and the buccaneering and privateering of the Sea Dogs like Hawkins and Drake in the 16th century led to the gradual but steady development of the naval strength so much so that the 16th century and the 17th witnessed the most extraordinary outburst of English exploring enterprise and colonisation. Still in the middle of the 17th century the Newfoundland fisheries were the greatest English enterprise and engaged about 270 ships and 20,000 seamen. From 1651 the development of the English navy was bound up with the famous Navigation Acts.

Navigation Acts and their effects (1651-1854)—The period from 1651 to 1830 in British colonial history is a period of trade ascendancy in which “that baleful spirit of commerce that wished to govern great Nations on the Maxims of the Counter”,* held the field. In 1651 a definite

* H. E. Egerton: A Short History of British Colonial Policy.

colonial policy was deliberately adopted which prevailed for more than a hundred and fifty years and which held that the *raison d'être* of colonies was to benefit the commerce and industries of the mother country.* It relegated the colonies to a position of permanent subordination in the economic evolution of the Empire, and aimed at moulding the Empire into one. This, however, could not be done without the development and strengthening of the mercantile marine. Hence we notice a number of attempts at the development of British naval strength by various rulers from the sixteenth century onward. British shipping and commerce have been developed under a series of strict regulations called the *Navigation and Trade Acts*. The British colonial policy since 1651 centered round the Navigation Acts or ordinances which had two objects in view (*a*) the encouragement of English Shipping and (*b*) the encouragement of English manufactures. The ordinance of 1651 was concerned with the first of these objects.

The policy underlying the Navigation Act of 1651 was, however, not new; it only gave an effective embodiment to a traditional policy.

*N. J. Shah: History of Indian Tariff, p. 92.

As early as the reign of Richard II an act, "to increase the Navy, which is now greatly diminished" had made it compulsory for English subjects to export and import goods in English ships having a British majority in their crew. But it remained a dead letter and in the time of Edward IV another Navigation Act was passed but it lapsed after three years. A further statute forbade the importation of foreign wine in any but English, Irish or Welsh owned ships. During the Elizabethan period, the spirit of adventure and enterprise being in the ascendant, the old measures were renewed and their enforcement made more stringent. They led to a large increase in merchant shipping. A direct encouragement was given by the Virgin Queen to the sea robbers and pirates, like Hawkins and Drake, in their activities of plundering and robbing the treasure-laden ships of the Spaniards. They were knighted for their bravery by her. After the defeat of the Spanish Armada in 1588, English merchant ships became more powerful and the ship-building industry grew apace. In 1624 the carriage of Virginian tobacco in foreign ships was forbidden and in 1641 some English merchants urged that these

rules should be embodied in an Act of Parliament. In 1646 the Long Parliament enacted that no duty should be levied on goods sent to the colonies provided they were carried in English ships. But by this time the Dutch had become the carriers of the world and monopolised its carrying trade. It was with a view to break up the Dutch monopoly that the Navigation Acts* of 1651 and 1660 were enacted, because it was the Dutch who undermined, hurt, and eclipsed the English navigation and trade. But the Acts forged fetters wherein the colonies were to be bound for many long years. They were only particular manifestations of the Mercantile system which aimed at a monopoly of commerce in the colonies of the mother country and had very disastrous effect on their economic development. It involved the subordination of the interests of the colonies to those of the mother country. It is because the Naviga-

**These Acts declared that no merchandise either of Asia, Africa, or America, except such as should be imported directly from its place of growth or manufacture in Europe, should be imported into England, Ireland, or our colonies in any but English-built ships. The ships must, moreover, belong to English subjects, be navigated by English commanders, and have at least three-fourths of the crew Englishmen. No European goods or manufactures were to be imported except in British ships, or ships of the nation who produced these products or manufactures. These laws continued in force till the 19th century (1825).—Gibbins.*

tion Acts marked for many generations the final triumph of this theory that they constitute a land-mark in English colonial history. In the words of E. Burke, "It was a system of monopoly. The Act of Navigation attended the colonies from their infancy, grew with their growth, and strengthened with their strength; they were confirmed in obedience to it even more by usage than by law. They scarcely had remembered a time when they were not subject to such restraint."

The Act of 1651 prohibited the export of goods to the colonies or imports thence into England except in English or colonial built ships, the property of English subjects, bearing English commanders, and a crew three-fourths of whom were English. The Act of 1660 forbade goods to be imported into or exported from British possessions except in ships "as do truly and without fraud belong to the people of England or are of the built of and belonging to any of the British possessions, whereof the greater and three-fourths at least of the mariners are English." If any foreign ship was found poaching in English or colonial waters it was to be forfeited together with its cargo. Foreigners were prohibited

from becoming merchants or factors in the colonies and the Governors were solemnly sworn to do their utmost to enforce the provisions of the Act re. "enumerated" articles which were of far-reaching importance. The eighteenth clause of the Act forbade certain "enumerated" articles *viz.*, sugar, tobacco, cotton, wool, indigo, ginger, fustic, or dyewood, to be shipped to any country except to England or some English plantation. All ships loading in the colonies any of the enumerated goods were to give bonds that their destination was England or Ireland. Not only this, the act forbade any direct trade between the plantations and the continent of Europe. All goods to be imported into continental countries from a plantation or goods to be exported from a continental country into a British plantation should be brought to England first.

A perusal of these provisions of the Navigation Acts brings out clearly the fact that they were the first definite statement of the theory that the colonies only existed for the benefit of the mother country. Their economic exploitation was to be carried on in a manner that would benefit the mother country, else it was thought

that they would defeat the object for which they were founded. ' The avowed object of the rules about "the enumerated articles" was increased employment for the navy, more freight and the snatching of the Dutch monopoly of the carrying trade so that the naval supremacy of England might be securely established. It was only a step further to prohibit the American colonies from manufacturing iron and steel goods or hats for which they had abundant raw materials at hand because they competed with the manufacturers of the mother country and hence were supposed to be truly prejudicial to, and inconsistent with, the interests of the mother country.

This Act of 1660 was further amplified and extended in 1663, 1672 and 1696. In 1663 foreign built ships in all cases were made alien and in 1664 European goods were required to be landed in England before being exported to the colonies. Another Act imposed upon the Colonial governors the duty of making annual returns of all ships landing any commodities in the colonies and of all bonds taken. In 1672, goods brought from one colony into another were subjected to the same customs duties which they would have paid if brought to England. A

new standing Commission for Foreign Plantations was set up which, among other duties, was to take a special care for the strict execution of the Navigation Act of 1660. In 1675 it was dissolved and a committee of Privy Council came to power in its place. Mercantile interests grew stronger and dominated imperial policy during the reign of William and Mary. The necessities of England required a national debt which could be provided only by the growing commercial classes whose interests demanded that England should become a great sea-power with a great sea-borne trade and colonies whose trade the Home manufacturers might monopolise. As a consequence, the Navigation Acts were consolidated and strengthened in 1696 and onwards. Governors were strictly pledged to a stringent enforcement of the Acts. Customs offices in the colonies came into existence with powers like the revenue offices in England; and admiralty courts were established. The carrying of wool or woollen manufactures of the plantations in America was forbidden not only to England but also to any other plantation on the ground that it weakened the dependence of the colonies upon England, injured both English

trade and shipping, diminished the volume of customs and enhanced the price of tobacco for the English consumers. A New Board of Trade and Plantations was set up. In 1705 rice and molasses became enumerated articles and to encourage imports of naval stores into England a bounty was given to the American Plantations. A few years later the rule that $\frac{3}{4}$ of the crew of vessels must be English was suspended substituting a proportion of $\frac{1}{4}$ instead.

To sum up: the British mercantile marine had been developed under a series of strict regulations called the Navigation Acts, which dated back to 1381, and aimed at the growth of English Shipping for the sake of defence. They had two sets of objects* in view:—(a) Political *i.e.* the preservation of national independence and (b) Economic *i.e.* “to reserve an area for English shipping, to make England an entrepot or distributing country, to make English ships go long distance voyages, to make the colonial trade centre in England, to out-distance the Dutch and employ Englishmen as seamen.” In other words the main economic aims were (a) to reserve the colonial trade for English shipping against

**Knowles: Industrial and Commercial Revolutions.* p. 294.

the Dutch, who at the time monopolised the carrying trade of the world (*b*) to render England an emporium for the trade of the whole world; and (*c*) thus to encourage and increase English shipping generally. With these objects in view the Navigation Acts of 1651 and 1660 were passed which prohibited or restricted foreign ships in certain lines of trade, reserved the colonial and coasting trade for English shipping, restricted the European trade in certain "enumerated commodities," like timber, corn, wine etc. to English ships or subjected them to additional duties if they were brought in foreign ships. To enable England to become a centre of the world entrepot trade some colonial goods like sugar and tobacco were also enumerated and had to be brought to England for distribution. Non-European goods were not to be brought from Europe so that English ships would go long distance voyages. The ships had to be English or colonial built, with the captain and $\frac{3}{4}$ of the crew being also English. Goods exported or imported in alien ships were subjected to specially heavy duties. The Acts regarded the colonies "as estates to be managed for the benefit of the mother country, and the economic

instrument of their control was transport and to regulate shipping to and from the colonies was to regulate the colonial trade." Hence, the colonial system and the Navigation Acts were a part and parcel of the same thing.

Effects:—"The general effect of the Navigation Acts was to project English shipping into the ocean trades distinct from the coasting trade round Europe and the Mediterranean. Whether it was because of these regulations or in spite of them, the British mercantile marine steadily increased during the 18th century. The growth of shipping may have been due to the large expansion of the English industry and the corn-export, which caused an increase of the exports and imports, which gave additional employment to shipping. As new colonial areas were added and the original colonies developed, the carriage of their produce would afford further scope for shipping. On the other hand, if it had not been for the Navigation Acts the Dutch might have absorbed the growing sea-borne trade of Great Britain as the English did that of the U.S. after 1870"* In other words, the Navigation Acts led to the growth and development of English

**Ibid*, p. 295.

mercantile marine, destroyed the naval supremacy of Holland and wrested the carrying trade from the hands of the Dutch. In the case of shipping these Acts served as crutches which taught the English shipping to walk. True it is that the Acts by themselves did not win naval supremacy for England, but were only a part of State policy to maintain the navy in such a state of organisation and efficiency as the world had never seen. Still, the Navigation Acts played their own part so much so that by the Treaty of Utrecht (1713) England, which was one of the sea powers before it, became after it, *the sea power* without any second. Then, the Acts increased the prices of goods, which increase tended to diminish as the English shipping developed under State encouragement and provided more tonnage. Another effect of the Navigation Acts was the growth and development of British manufactures under the shelter of protective duties, prohibitions or restrictions on imports of manufactures and the free entry of colonial raw products and food-stuffs. Had it not been for the snatching of the most lucrative carrying trade from the Dutch, the stream of capital, which flowed into the coffers of the

English nation, would not have been there and this lack of capital would have prevented England from embarking on her large-scale enterprises in manufactures and distributing trade during the last quarters of the 18th century. It can be said without any fear of contradiction that the Navigation Acts leading to commercial colonisation and capitalistic exploitation of colonies helped materially in making England the world's ship-builder, the world's carrier, the world's clearing house, the world's entrepot, and the world's workshop. On the dark side, from England's point of view, the upshot of the Old Colonial System as embodied in the Navigation Acts, was the American War of Independence which culminated in the loss of her thirteen American colonies or of the first British Empire.

Briggs and Jordon, however, in their Economic History of England hold that it is very doubtful if the Navigation Acts seriously injured England's Dutch rivals*; that they all but ruined the Baltic trade of the English because English-built ships were not adapted for that purpose. The clause making it obligatory to

*Gibbins also holds the same view.

buy foreign goods at their place of origin reacted against the English and ship-building materials and naval stores rose enormously in price. The exclusion of foreign competition was followed by a rise in the freights of English ships and a consequent rise in the prices of English goods in foreign markets. Adam Smith, however, defended these laws on the ground of security being more important than wealth but the beginning of the 18th century, (1703), saw a very important treaty with Portugal whereby the latter agreed to receive English cloth free of duty in exchange for lowered duties on port wine.

The history of English shipping after the closing years of the 18th century can be divided for the sake of convenience into four broad periods (1) 1796-1854, the period of the freedom of English shipping; (2) 1854-1880, the period of steamships, (3) 1880-1914, the period of growing foreign competition and amalgamations; and (4) 1914 to the present day.

After the second half of the 18th century the extreme mercantilist view began to decline and by its end English shipping had become strong enough to allow modifications of the Navigation

Laws. Between 1796 and 1822 minor relaxations were effected, between 1822 and 1825 monopoly gave place to reciprocity and between 1849 and 1854* the Navigation Acts were repealed and the colonial trade was thrown open. These Acts, as adverted to above, culminated in the successful revolt of the American colonies and their loss led to a modification of the rule which required that all goods from America, Africa and Asia should come to England in British or colonial ships. During the French wars, however, the desire to have American cotton and food-stuffs led to the permission, in 1796, to the American ships of the neutral U.S.A. to come to Britain. *Secondly*, the inter-colonial trade, which had been reserved for the British or colonial ships, was thrown open to U.S.A., so far as the West Indies were concerned in 1796, and Canada in 1807. Similar concessions were granted to Brazil in 1808, and to the Spanish America in 1822. *Thirdly*, on account of the threatened retaliation of other powers to shut off British ships from their waters, the Parliament authorised the Crown (1823) to enter into reciprocal treaties regarding shipping with foreign powers. Britain gained

much from these mutual concessions. Therefore treaties were made with Prussia, Denmark, Sweden, the Hanse towns, Mecklinburg, Hanover, U.S.A., France, Austria, Frankfort, Venezuela, Holland, the Zollverein and Russia between 1825 and 1843. *Fourthly*, the colonial trade was made free between 1822 and 1825 by the abolition of the "enumeration" of colonial goods, and by granting permission to the colonies to trade directly with foreign countries. However, the goods of non-European origin still could not be brought from Europe, the enumeration of European goods was still maintained and the inter-imperial trade was still reserved for the British or colonial shipping. Similarly goods from Asia or Africa could not be brought in any but British ships.

By 1840, however, the free trade movement was in full swing and the British merchants, who were opposed to all sorts of restrictions, were anxious to charter American ships freely so that the freight would be lowered by competition. The colonies found that the preferences they had enjoyed so far were dwindling on account of the free trade policy of England and therefore they too were anxious for the abolition of restric-

tions not offset by preferences. After the abolition of the Corn Laws in 1846, for example, Canada was anxious to hire the cheaper American ships for her trade with the West Indies. The free traders believed that, if England repealed the Navigation Laws, other countries would follow suit. There was a large party in England, however, which was opposed to the freedom of trade on account of the fear that English ships due to their greater expenses in construction would not be able to withstand foreign competition and therefore their sea power dependent on mercantile marine would fall. In spite of them, however, free trade gained the day, and the Navigation Acts were repealed in 1849, the coasting trade became free in 1854, and there was no obligation to man ships with British seamen. Thus, after a control of 473 years (1381-1854) English shipping became free. British shipowners, however, were never encouraged by grant of bounties nor restricted in the way of their business.

The second period of the History of British shipping begins in 1854 and continues right up to 1880. It might be called the period of steamships and the continuous change in technique.

Between 1850 and 1860, the iron steamships began to prove a success both for passengers and cargo. The evolution of the iron ship was, however, gradual. In 1787 Wilkinson built an iron canal barge. In 1820, an iron ship, to be worked by steam was built in Staffordshire. At this period, steamers in general were only small crafts that sailed most of the way and only turned to steam when the wind failed. Even by 1870, the sailing ship was still the predominant type of ship. "British sail tonnage was still four times as great as the steam tonnage."* It was because the idea was prevalent that steamers would spoil the flavour of comestibles carried as cargo. The first steamships, therefore, developed as liners to carry passengers emigrant traffic and mails. The small trader was now in a position to carry on trade in lots and to take part in the colonial trade and the development of the tropics. Formerly only great merchant houses could charter a whole ship. By 1850, moreover coaling stations were established, and the ships were no longer required to carry large quantities of coal. The main complaint against them thus disappeared. The opening of the

*G. C. Allen: *British Industries*, p. 147.

Suez Canal gave a great impetus to the adoption of steam as sailing vessels cannot navigate the canal or "the ditch"; but it was the rapidly expanding international trade creating a great increase in demand which reacted most powerfully on the change over from wood and sail to iron and steam.

The four things aimed at in building and working a ship are economy of fuel, economy of labour, space for cargo and cheapness of construction. The compound engine brought about an economy in the use of coal, cheaper working and greater space for cargo. The cargo carrying capacity was increased still more by the substitution of steel for iron and the development of the marine engine or surface condenser. The same factors brought about the cheapness of construction even. The improved condenser dispensed with the necessity of the ships to carry large quantities of fresh water by making it possible to use the same water for two continuous months in the boilers. It, therefore, reduced the consumption of coal, extended the boilers' life and economised space. These two inventions not only revolutionised the steam shipping but also caused a phenomenal

drop in freights and stimulated the development of trade in primary and bulky products. The accelerated speed of the steamships and mechanical loading and unloading at the docks economised time and enabled them to make more voyages and reduce the freights still further. Finally steel began to be used for the manufacture of steamers from the 'eighties and being lighter than iron enabled more cargo to be taken. The life of ships was prolonged and the increase in their size economised labour per ton of cargo. With the fall in prices of steel during the 'eighties, the change from iron to steel was completed by 1890 and more economical marine engines were evolved. The relative superiority of British iron manufacturing and engineering supplying materials to the ship-builders easily and cheaply enabled England to outstrip her rivals in ship-building and shipping in the era of the iron and steel steamships. Other contributory causes for her supremacy were the abundance of cheap bunker coal, the large share of the world's carrying trade, her free trade policy, her diversified industrial life and technical changes in the metallurgical and engineering trades. By 1913 the British shipyards were building mostly

steamships. On account of all these improvements the United Kingdom became the greatest naval power in the world. At the outbreak of the War, the British mercantile marine was the largest, the most up-to-date and the most efficient of all the merchant navies of the world. She was also the carrier of the world.

It is interesting to notice that the change from the sailing ship to the steamer was assisted to a certain extent by the subventions given by the British Government for the carriage of the mails. Cargo ships, however, received no aid at all. In 1894, it was calculated that the proportion of British shipping receiving postal or construction subventions did not amount to more than 3% of the total. It might therefore be truly said that English shipping received no government aid except for services rendered and that by far the largest proportion of her ships were built and launched without any government aid whatsoever, at a time when her ports were thrown open to all the world.

The third period in the history of British Shipping begins in about 1880 and lasts up to the Great War. It might be called the period of foreign competition, and of consequent amalgamations. During

the nineteenth century, Great Britain witnessed the eclipse of one great shipping rival and the rise of another. The development of American shipping during the first two quarters of the 19th century became so threatening that England could no longer be correctly styled "the Mistress of the Sea." Within twenty years, however, all was altered. The Civil War in the U.S.A. brought about a destruction of her shipping with the result that the American rivalry for the time being came to an end. She began to exploit her rich internal resources and left the maritime field free for U.K. In the middle of the 'eighties, there began to develop a new form of competition. With the accentuated nationalism of the period, after the Franco-Prussian war, nations began to develop their own shipping and to be less dependent on Great Britain. For this purpose indirect railway concessions were granted. France started the elaborate bounty system in 1881, and was followed in 1885 by Germany, Italy, Austria, Hungary, Japan, Russia, the U.S.A., etc. On account of such protective measures and subsidies, there was a rapid development of the German mercantile marine and it soon became a formidable competitor of Great

Britain. In 1892-94 Great Britain built $\frac{4}{5}$ of the total gross tonnage of new merchant vessels but by 1900-4 this proportion declined to 59% but thereafter it increased to 61% in 1910-14. The general effect of the development of the foreign mercantile marines was that although the volume carried in British ships was increasing, the proportion of the world's trade carried in British ships tended to decline.

The result of this competition was the growth of rings or conferences fixing rates by agreement. A movement towards amalgamation set in in 1900 and it was greatly stimulated by the Great War. By 1919 a "Big-five" control of passenger lines had been established. On account of the drop in freight due to competition, shipping became unremunerative and highly speculative. To check this, conferences became inevitable. The first of these was held in 1875 to regulate the Calcutta trade, and in 1879 the China Trade Conference was formed, in 1884 the Australian; in 1886, the South African; in 1895, the West African and the North Brazilian; and in 1896, the river Plate and the South Brazilian; and in 1904, the Conference of the trade of the West Coast of South America. The Conferences not

merely fixed freight rates, but they also entered into understandings and agreements to respect each other's spheres of influence. The "deferred rebate" device was evolved to control the shipping merchants by the shipping lines. The users of the conference lines only were granted a rebate calculated for the previous six months and paid six months later. Later on Conference agreements were entered into between the German and British shipping as well. Such was the condition of the British shipping when the Great War began. After the War, however, Germany had been crippled, but Great Britain had to face two new competitors, namely, Japan and the U.S.A. An Imperial shipping committee began to function from 1920.

Although the development of British shipping has in general been the outcome of private enterprise, signs are not wanting that Government would interfere to protect its shipping, against a concerted attack by foreign governments. It has been prepared to grant loans in case the prestige of English shipping was in danger, as in 1903. In 1906, the English load line was raised to the same height as in Germany. The Government also retains the right of reta-

liation against any foreign country that penalises the shipping of the United Kingdom. In spite of these, Government control of the mercantile marine appears to be rather difficult. Unlike railways, ships do not require land, and they sail far away from the mother country. They might load and reload their cargo several times without coming back to their own country. On account of these the government control of shipping is more difficult than that of railways.

Shipping since the Great War—The War of 1914-18 dealt a very severe blow to English shipping which lost many ships of the finest and most efficient types. On the one hand, the shipment of munitions, clothing and food supplies from abroad was vital to the successful operation of the War; on the other, the German submarine menace aimed at prevention of these vital supplies from reaching the allied nations. Between 1914 and 1918 the German submarine campaign inflicted a loss of 8 m. tons of British shipping. The War, therefore, gave an impetus to ship-building in England, but specially in the U.S.A. and Japan. Commerce, specially carrying trade, however, suffered on account of lack.

of adequate tonnage because a large portion of it was devoted exclusively to military services of patrol and transport. Freights rose rapidly in 1915 after which the Government restricted the rates and introduced a centralised control. In the beginning of the War, like railways, the ships were controlled by the State which requisitioned ships on a large scale for transport and supply-services, *i.e.*, war needs. Nearly 20% of the total tonnage was thus taken over at "blue book" rates (rates fixed by arbitral boards). A Government scheme of marine insurance protected the non-requisitioned vessels. Later on freights rose very high and there was a dreadful congestion in the western European ports on account of scarcity of tonnage and labour.

The Labour Party in 1915 suggested to the Government to command all the ships and fix maximum freight rates, but by the end of the year the Government only requisitioned all refrigerated space in meat importing vessels of Australia and Argentine. Two Committees were appointed to commandeer ships and cargoes, to make up the monthly quotas prescribed by the Cabinet Committee on Food Supplies and the other to license the employment of non-

requisitioned ships. The fixed rates and Government control restricted the profits which were further reduced by 80% Excess profits Duties. The loss was the heaviest in the oceanic and distant trades and in specialised vessels like tanks and refrigerators. When the policy of governmental requisition and regulation of freight was found inadequate, imports began to be restricted from 1916. Some imports were altogether prohibited, others were permitted under a licence which was refused after the imports had reached certain limits. In the beginning this plan was applied to paper for periodicals, tobacco, furniture woods, building stone and slate but by 1917 it was slowly extended to other commodities. But the difficulty of determining the relative importance of various commodities to the economic life of the people led to the adoption of more stringent methods. A Shipping Controller was appointed and great efforts were made to increase ship-building; a Ministry of Shipping was created with wide powers of allocation of shipping to the departments of the Government, *viz.*, the War Office, the Ministry of Munitions, the Ministry of Food and the Board of Trade which controlled the supply and distri-

of adequate tonnage because a large portion of it was devoted exclusively to military services of patrol and transport. Freights rose rapidly in 1915 after which the Government restricted the rates and introduced a centralised control. In the beginning of the War, like railways, the ships were controlled by the State which requisitioned ships on a large scale for transport and supply-services, *i.e.*, war needs. Nearly 20% of the total tonnage was thus taken over at "blue book" rates (rates fixed by arbitral boards). A Government scheme of marine insurance protected the non-requisitioned vessels. Later on freights rose very high and there was a dreadful congestion in the western European ports on account of scarcity of tonnage and labour.

The Labour Party in 1915 suggested to the Government to command all the ships and fix maximum freight rates, but by the end of the year the Government only requisitioned all refrigerated space in meat importing vessels of Australia and Argentine. Two Committees were appointed to commandeer ships and cargoes, to make up the monthly quotas prescribed by the Cabinet Committee on Food Supplies and the other to license the employment of non-

requisitioned ships. The fixed rates and Government control restricted the profits which were further reduced by 80% Excess profits Duties. The loss was the heaviest in the oceanic and distant trades and in specialised vessels like tanks and refrigerators. When the policy of governmental requisition and regulation of freight was found inadequate, imports began to be restricted from 1916. Some imports were altogether prohibited, others were permitted under a licence which was refused after the imports had reached certain limits. In the beginning this plan was applied to paper for periodicals, tobacco, furniture woods, building stone and slate but by 1917 it was slowly extended to other commodities. But the difficulty of determining the relative importance of various commodities to the economic life of the people led to the adoption of more stringent methods. A Shipping Controller was appointed and great efforts were made to increase ship-building; a Ministry of Shipping was created with wide powers of allocation of shipping to the departments of the Government, viz., the War Office, the Ministry of Munitions, the Ministry of Food and the Board of Trade which controlled the supply and distri-

bution of the essential articles of food and raw materials for the whole country.

The marine losses caused by the German submarines, the high rates and heavier demand led to the necessity of building new ships as fast as possible but because many ship-yards were requisitioned by the Admiralty and there was a dearth of labour, specially skilled labour for marine engineering, and shortage of steel the output of vessels could not be increased to meet the demand. In 1916, the new output was only $\frac{1}{3}$ of the losses. Therefore from December 1916 the Controller, and later on, the Admiralty was entrusted with mercantile construction. "Attempts were made by the standardization of ships, by the introduction of mechanical devices, by labour "dilution" and by the release of skilled men from military duties, to accelerate the rate of construction. Shipbuilders were urged to extend their plants and the Government itself began to establish new shipyards". With all this intensified activity British ship-building capacity increased only by 25% and the tonnage of the merchant fleet was in 1919 14% less than that of 1913 and the proportion of the British tonnage to the world fleet fell from 39 to 33%.

The protests against the large profits of shipping firms (20% to 50%) led to the assumption of complete control of all merchant shipping except small coasting vessels by the Controller in accordance with which all profits made over the "blue book" rates were to be given to the Government. From 1917, when the submarine warfare became more acute, this national control of shipping was supplanted by an international control of the Allied Powers to ensure an adequate and timely supply of essential materials for a successful termination of the hostilities.

The germ of this international allied co-operation already existed in the International Commission in England but it was a British organisation purely consultative and a co-ordinating agency for the receiving and distributing of orders from national purchasing agencies. To meet the need of a more permanent and effective machinery an Inter-Allied Shipping Committee was set up in January, 1917, to allocate tonnage among the co-belligerents but it failed, and in April it was decided to requisition neutral shipping in Allied ports without the consent of their owners. When it was realised that the control and allocation of shipping was at the

root of the economic problem of the Allied Supplies, an effective and continuous machinery for inter-allied economic co-operation was created after the Allied Conference in Paris in November, 1917. Thus came into existence the Allied Maritime Transport Council with permanent executive in London which in 1918 performed very valuable functions of allocation of war and other essential materials to the Allied Powers and of transporting American troops to France. The Council developed two supplementary bodies—the Inter-Allied Food Council and the Inter-Allied Munitions Council. After the *armistice* in November, 1918 the Council was scrapped and in 1919 the policy of decontrol was instituted.

The naval supremacy of Britain was seriously threatened by the remarkable growth of the American and Japanese shipping during the War. Her ship-building capacity, however, was increased during the post-war period and the elimination of Germany as a rival added to her strength. The neutrals had been dumping during the War with a view to destroy the British Foreign industry and the emergence of oil fuel for ships had influenced adversely the

British shipping industry and trade, because, before the War, English coal used to be exported in vast quantities to supply bunker coal to the ships. This prevented the ships on their return journey laden with raw materials and food stuffs from going out in ballast and enabled England to import her raw materials and food supplies at very favourable freight rates. Coal occupied a large space but the bulky primary products occupied a larger space and, therefore, if coal could be exported by the ships the imported materials would not bear the cost of transport both ways. Hence, the decline in the coal trade in the post-war period also caused a decline in shipping and ship-building. Shipping difficulties increased after the passing away of the Council, congestion intensified and labour troubles among dock and other maritime labourers ensued. England got a part of the German and Austrian ships that were surrendered.

The post-war price boom in trade caused a boom in shipping freight. With the policy of decontrol the demand for shipping space to fulfil the orders placed during the war became urgent, and in spite of increased world fleet, it was unable to cope with this sudden demand.

The War had dislocated shipping services, made an uneconomical use of the tonnage and prevented normal renewals and replacements. Many vessels were in bad repairs. On account of the losses there was a shortage of fast and long distance passenger and cargo liners and construction during the war in England had been mostly confined to frozen meat ships and tankers while tramps built after 1917 were unsuited for the special needs of the tramp owners. Therefore freights rose very rapidly. Between July, 1914 and February, 1920, freights rose by 500% while general wholesale prices had risen only by 200%. The value of the existing ships rose and caused a boom in production. In 1920 over 2 m. tons. were launched and in 1921 the tonnage under construction was 3.8 m., while the pre-war maximum was only 2.6 m. tons. About 40% of this was foreign buyers'. Yet in 1921, the total tonnage was raised only slightly though the world fleet registered an increase of 29% over the pre-war tonnage. With the disappearance of the boom freights began to decline and remained low in relation to general prices. With the reduction in the volume of international trade and construction of war ships British shipping.

was depressed. The total output of the British yards in 1922-25 was less than $2/3$ of that of 1910-13 and her share of world production declined from over 60% to 49% in the same period. This was due to the large output of Germany to some extent. Then the coal strike of 1926 hit very hard the British shipping and shipbuilding industry. After this due to the recovery of international trade the shipbuilding industry made a rapid recovery and increased its world share to 53% in 1927-30, but she could not recover her pre-war position, except for once in 1929. This was due to her export trade and naval demand being less than the pre-war figures and to the introduction of new types of vessels like the "oil-burner, the oil-tanker; the electro-turbine-driven vessel and particularly the motor ship."

The high cost of bunker coal during and after the War caused the use of substitute fuels and the evolution of Diesel engine. Economy in space and running costs, speed and convenience led to the use of oil engines and oil-fired steam engines and this deprived Britain of its relative advantages in the supplies of bunker coal. Her lack of oil supply compelled her to concentrate more

on steamship construction than on motor-ships. Yet she retained a very high proportion of the world's output, remained ahead of any other country and her shipping industry adjusted to the changed conditions. But unemployment never fell below 20% in this period and real wages were lower than pre-war days.

The economic blizzard of 1929-30 then caused a severe decline and unemployment in 1933 affected 63% of its insured labour force. The output fell from 1.5 m. tons in 1930 to 1,31,000 tons in 1933 and her proportion of the world output fell from 51% in 1930 to 27% in 1933. The Government increased subsidies to foreign ships badly hit the British shipping. By 1934, however, a recovery set in when the tonnage was 6,04,000 in September. On November 30th, 1934, the Government announced that they would subsidize British tramps and make advances to shipowners for scrapping and building with a view to diminish surplus tonnage and to increase the replacement demand for new ships. But the recovery in spite of this has been very slow because international trade has failed to recover from the depression as quickly as world production due to restrictions like exchange

clearings, quotas and import boards, etc. Therefore it is difficult for the ship-building industry to recover its pre-war position. Britain now occupies the second position in ship-building. The Ministries of Transport and Shipping have now been merged with the Ministry of War Communications.*

CHAPTER XXI

FISCAL POLICY.

The fiscal policy of Great Britain during the 18th and 19th centuries, can be studied in several parts. The first part can be roughly supposed to begin from 1721 and to last upto 1783. Walpole was the inspiring figure of this period. To secure for his country internal and external stability was the dual purpose of his life. The first was secured by the development of the cabinet system, and the second by naval security and the avoidance of fruitless war.

In trade policy, Walpole's age was the age of mercantilism and he himself was a mercantilist. Protection of native industries, coming down from preceding years, was continued by him, and persisted after him. Small regard was paid to the final consumer. The import of foreign articles, whether fully manufactured or semi-manufactured, was prohibited, in case they came into clash with native industries. Encouragement of industry was further effected by the encouragement of export, and took three forms—the abolition of prohibition and prohibitive duties on export, export bounties, and the

drawback of import duties on re-export. In 1721, Walpole removed the export restrictions on over one hundred articles of manufacture, and at the same time gave freedom of import to certain raw materials, such as indigo and flax.

In colonial affairs, Walpole showed his shrewdness by declining to entertain the idea of taxing the colonies and by winking at the infraction of unenforceable laws. In 1733, the Molasses Act was passed, but it was allowed to remain a dead letter. Unfortunately, after his downfall, this wise policy was abandoned. In 1764, the Molasses Act was re-enacted, though the duties were lowered from 6d. to 3d. In 1765 was passed the Stamp Act, and in 1773 the East India Company was given a monopoly of the American tea trade which resulted in the Boston Tea Party. Walpole's successors forgot his ruling motto, 'let sleeping dogs lie' and brought about the War of American Independence.

Walpole made his name as a financier by the handling of the South Sea Crisis in 1720. The bursting of the South Sea Bubble engendered a long-lasting distrust of Joint-Stock organisation and but for Walpole's arrangements, the scandals

underlying it would have never been hushed up. While in office, he devoted his financial genius also to the task of meeting from existing taxes an expenditure loaded with the charges of past wars. In his efforts thereto, he laid the foundation of something approaching to a system of taxation. The sources of revenue at Walpole's command were three-fold—customs, excise and land tax. Customs duties were the least unpopular; for British imports were mainly luxuries and it was believed that their burden fell on the foreigner. Excise yielded money in war as well as in peace, and being levied internally, it was harder to evade. But for this reason, and because the articles in most general consumption were necessities of the poor man, it was intensely unpopular. There remained the land tax, or tax on rents which was paid by the landed proprietors. Walpole strove hard to keep it down, for he realised that its incidence was unequal, and he desired to placate the landed gentry. In 1732, to avoid raising it, he reimposed the intensely unpopular salt excise. In 1739 when the nation went to war on account of Jenkin's ear, the land tax was raised to four shillings, at which rate, it remained for the next

half century, till it became a fixed charge on landed estates.

There were, however, two possible sources of increased revenue which did not involve the formal imposition of new taxation. The first was the diversion of the surplus on the debt funds. This surplus might arise either through an increase in the yield of taxes pledged to payment of interest or through a reduction in the rate of interest itself, Walpole's stable government achieved. The second source of improved administration was customs. Here his main difficulty was the prevalence of smuggling, and he could only direct this by collecting the bulk of the duty inland through the machinery of the excise. In 1724, he applied this method to tea, coffee and chocolate, and in 1733, he tried to do the same with wine and tobacco. This reform, however, was seriously opposed by his opponents. He was trying, said they, to make the Crown independent of Parliament and to foist on the people a general excise. This time Walpole had to yield, and after this he tried to make no more reforms.

The second period of British fiscal history begins from 1783 and lasts up to 1815. The

dominant personality during this period was William Pitt. He was in office from 1783 to 1801 and again from 1804-1805. He introduced important fiscal reforms. He went as far towards free trade as the industrialists would allow him, but that was not far. In 1785, he failed with Ireland. Anxious in particular to encourage the Irish linen industry, he proposed reciprocal lowering of duties, but the cotton manufacturers and the iron masters feared the Irish competition, and through their influence the proposal was defeated in the Parliament. His treaty with France of 1786 was favoured by big manufacturers, but on account of the prohibition of French silk continuing, the treaty was one-sided, and could not be expected to continue long.

As a financier Pitt observed the principle that true economy was better than a great revenue. He reduced waste by rooting out jobbery and corruption. He addressed himself at once to the revenue frauds which had beaten Walpole. Like his illustrious predecessor he saw that the key to the smuggling situation lay in the use of excise authorities: therefore while he clarified the distinction between custom and excise departments, he worked them in close conjunc-

tion. The trade in tea and spirits was under excise before Pitt's time. He extended this supervision to wines in 1786, and to tobacco in 1789. In 1787, he effected a consolidation of tariff, and substituted a single rate for each article, thereby enormously simplifying the burden on the trader. In the new rate book, the duties as far as possible were made specific, *i.e.* calculated on weight and size. The consolidation of revenue was in keeping with the consolidation of the tariff. All taxes were to be paid into one consolidated fund from which the permanent charges on revenue were met.

These administrative reforms were accompanied by a solemn effort to pay off the national debt. Reduction in interests had been secured by Walpole. At Pitt's accession nearly the whole of the debt was in 3% stock, and was well below par. A scheme of debt redemption, therefore, involved the purchase of 3% stock in the open market. Pitt announced his plan in 1786, but it could not come to a successful issue on account of the Anglo-French war breaking out in 1789. The war necessitated additional borrowings; new taxes, and a great strain on currency and credit.

The third period of the British fiscal history begins in 1815 and comes up to 1850. The notable figures during this period were Huskisson and Peel. The work of the former began in connection with Corn Laws. After a minute inquiry in 1815, it was decided that when the home price of wheat was at or under 80s. per quarter, foreign wheat was excluded, but when the home price was above that figure, it was allowed in duty free. This was called the hated law of 1815. The effect of this law was practically nothing. In spite of the prohibitive duties, agriculture languished, and the foreign trade was checked. Huskisson therefore proposed to admit foreign corn at a certain scale of duties and thereafter to keep the ports continuing open. The Act of 1822, effected something quite different. It opened the ports to new wheat only when the price should have reached 80s. and closed them again when it should fall below seventy shillings. In 1827, under the Premiership of Canning, he made a final effort for a general settlement. There was yet no talk of total repeal; the choice lay between a fixed duty and a sliding scale. The bill of Huskisson, however, was thrown out on

technical ground, and in its place Duke of Wellington's sliding scale was passed, which held the field till 1841.

The second field of Huskisson's work was Navigation Laws and Commercial treaties. On account of occasional additions, Navigation Laws had become so complicated, that every now and then traders had to take legal advice upon their provisions. The overhauling of the code was thus long overdue. Wallace began its revision in 1822, and Huskisson completed it in 1825, bringing the Navigation Laws to the following position. (i) In European trade, the only restriction was the 'Prohibition of a pick up traffic in enumerated goods'. In 1838, this class of restriction was waived by a special treaty in favour of Australia. In 1848, the term natural outlet was interpreted so liberally that Navigation Law restrictions on trade originating in Europe were virtually removed. (ii) In the trade with Asia, Africa and America, the long haul was still-reserved to British ships against other European carriers. The shipping of the new independent countries in North and South America, was allowed a share in the trade, on the condition, that the trade whether in British

and foreign ships, must be direct. (iii) In the colonial trade, inter-imperial trade was still reserved to British and colonial shipping. But the colonies were allowed to send their produce to foreign countries in anybody's ships, and foreign countries were allowed to send their produce to the colonies through specified ports of imports provided such foreign countries gave Great Britain similar facilities in their own colonies.

The third field of Huskisson's activities was Imperial preference. When by the legislation of 1822-25, the ports of the colonies were freely opened to foreign goods, such goods were subjected to duties which competed with the manufactures of the mother country. The preferences from the colonies were dictated by the mother country, and therefore were displeasing to the colonies. Huskisson, however, could not accomplish much in this direction. The position which he found, and the position which he left, was that the colonial legislatures levied certain duties for revenue, while the Imperial Parliament levied further imperial duties (the proceeds of which went to the colony concerned) in the interest of the British trade.

The fourth field of Huskisson's work was in the revision of the tariff. He replaced prohibition and prohibitive duties by moderately protective rates, and set 30% as the upper limit beyond which protection would be thwarted by smuggling. The duties on silk, linen, woollen and cotton industries were fixed at 30%, 20%, 15% and 10% respectively. To protect the manufacturer against foreign competition the duties on many raw materials of the textile and metal industries were lowered.

In all these activities of his, Huskisson prepared the way for Peel as Peel did for Gladstone. Peel continued the work of Huskisson. The Corn Laws, as modified by Willington's sliding scale, did not improve the agricultural situation. Between 1828 and 1841, a good deal of academic discussion on Corn Laws took place. In 1842, Peel, therefore, made one last effort to improve the Corn Laws in accordance with the ancient tradition of protection in seasons of plenty and free imports in seasons of scarcity. In the meantime, the Anti-corn Law League had been founded, demanding the total and unconditional repeal of Corn Laws. Down to 1845, Peel showed no sign of surrender, but in November

of the same year, he asked his cabinet to consider repeal. Some members being unwilling, he had to submit his resignation, but since the opposite party failed to create a government, he came to office again, and repealed the Corn Laws in 1849. According to this Act, a uniform registration duty of one shilling per quarter was to be levied. This duty lasted till 1869. Corn Laws having been repealed, the Anti-corn Law League dissolved in a chorus of self-congratulation.

Under Huskisson, Navigation Laws were modified. The survivals died hard, some of them even outliving Peel. In 1849, however, under a protest from shipowners, Navigation Laws came to an end. Only the home coastal trade was reserved which was thrown open in 1853, in the hope that America would reciprocate, but the hope was unfortunately belied. The repeal of Navigation Laws was attended by no ill-effects, for in the subsequent period neither the navy declined nor even the mercantile marine.

Huskisson's preferences were very comprehensive. They were applied with a balanced regard for every part of the Empire. After his

death, the cause of imperial preference fell into disrepute. Peace threw the question of imperial self-sufficiency into the background. In 1846, the repeal of Corn Laws ended the corn preference; in 1854, the duties on colonial and foreign sugar were equalised; in 1860, those on wine and spirits; in 1863, those on tobacco. In 1860, the preference on timber and silk disappeared, silk goods being placed on the free list. Thereafter for more than thirty years, the once great imperial cause lay entombed in the laden shell of Gladstonian finance.

Peel brought about some reforms in the excise also. Walpole and Pitt had considerably increased the work of the excise department by placing customs under its supervision. The combined action necessitated a great army of excise men and irksome restrictions on traders. In 1832-36, therefore, an excise inquiry was held. According to its recommendations, many of the surveys were abolished, and thus the work of the excise department was considerably lessened.

Peel affected many tariff reductions, and imposed an income-tax to make up their loss. In 1843, the export of machinery was freed; in

1844, the export and import duties on raw wool were abolished; and in 1845, the free list was extended to cotton wool even. The excise duties also were, along with this, abolished. In 1832, the excise on leather, printed calicoes, candles and slates were abolished; in 1833, those on tiles, starch, stones and earthen bottles, the glass tax was abolished by Peel in 1845, and that on soap, brick, and paper was removed by his successors.

The *fourth period* of the British fiscal history began in 1850 and came down to 1895. Gladstone was the ruling figure of this period. His first work was to bring about the completion of free trade. Cotton yarn and manufactured cotton were freed respectively in 1853 and 1860. The excise duties on soap and paper were abolished in 1853, and 1861 respectively. Timber became duty free in 1866, and sugar in 1874. Free trade meant to Gladstone something more than the abolition of protection. In 1853, therefore, he revised the stamp duties on commercial and legal documents.

There was now the problem of making up the loss caused by free trade. Gladstone was opposed to income-tax, but on account of the

Crimean war, he could not drop it. He therefore aimed at making up the loss by indirect taxation. In imposing it, he followed certain rules which might be summarised thus: (i) Concentrate the taxes on a few great articles in general consumption. (ii) Tax for revenue only. (iii) Avoid raw materials and necessary foods. (iv) Select the final stage of manufacture as the point at which the tax is imposed. (v) To help the wage-earner, first free the industry and then reduce the price of articles in general consumption. (vi) Employ specific in preference to *ad valorem* duties.

The *fifth period* of British fiscal policy began in 1895 and continued up to the Great War. The chief figure in this period had been Joseph Chamberlain. On account of the partition of Africa, and the rise of Germany as a colonial power, Great Britain once more turned her gaze to the old imperial path. The era of new constructive imperialism began. In this, Joseph Chamberlain played a very prominent part. He infused a new spirit in the Colonial Office. He realised that the key to Africa was the valorisation of its hinterland by capital expenditure on communications. He made war to the Depart-

ment of Agriculture for the West-Indies. This is what he did for the tropical colonial empire.

To the self-governing colonies also, Chamberlain rendered signal services. He presided over the passages of Australian Commonwealth Act of 1900. He associated the self-governing colonies with the privilege of Trustee investment funds by the Act of 1900. He was the moving spirit on the British side in the Imperial penny post. He carried the government with him in 1897 in securing the treaty modification which allowed Great Britain to accept the Canadian preference. His work in this direction, however, was not yet complete, when he died in 1914, one month before the war.

His work, however, has been continued after him. The lessons of the war have not yet been forgotten, and mutual preferences have been permitted. Under the Safeguarding of Industries Act (1921), empire products received preferential treatment, and in the Imperial conference of 1923, it was proposed to stabilise and extend preferences. In brief, since 1906 there has been a growing sentiment for imperial preference and since 1918 a considerable departure from free trade.

Reaction against Free Trade after 1870

Down to 1870 the tendency towards reduced tariffs was strong. Austria and Italy in 1875 and France in 1879 repudiated treaties. In France import duties on cotton and wool were raised in 1881 from 2 p.c. to 44 p.c. and except for the treaties with Portugal (1882) and Spain (1885) renewal of treaties was secured at disadvantageous terms. Hence a reaction against treaties even among free traders set in.

Reorientation of free trade—State intervention in factory, housing conditions etc. on account of unfair competition between the employer and the employee—and non-intervention in commerce, because it ensures cheapness and plenty for consumers and mitigates hardships of life, began to be advocated. There were many *modifications of free trade doctrine*—(a) “Key” industries, shipping subsidies after 1880 (Cunard agreement to control ships of the White Star line), Bounties on sugar (W. Indies in 1902). The colonial empire tended towards stronger economic ties and the Imperial Federation League was also formed.

Causes of the Reaction—(1) *Trade depression* in 1879, 1886, 1894, 1903 and 1922—Recipro-

city, Fair trade, Retaliation; Countervailing Duties, Colonial Preference were proposed as devices for "taxing the foreigner"; "cementing the bonds of Empire"; and "Keeping the home fires burning." (2) *Unfavourable Balance of Trade* during the 'seventies and the protests of agricultural interests. (3) *Growth of international competition*, causing the loss of practical monopoly in some industries and leading to second position in others against Germany and U.S.A. This led to the advocacy of Imperial Preference in 1886 by R. Churchill. Colonial Conference began to be organised—1887, 1897, 1902—aiming at Free Trade within the Empire. (4) *Joseph Chamberlain as Colonial Secretary in 1896 advocated and Imperial Customs Union*. His propaganda for preferential tariffs within the Empire caught the imagination of the people and the Tariff Reform League "to consolidate and develop the resources of the Empire, and to defend the industries of the U.K." was formed. But with the split in the Unionist Party and the victory of the Liberals, pledged to Social Reforms, the Tariff Reform fell into the background and did not emerge as living issue till Baldwin's espousal of the protec-

tionist cause in 1923, on which issue, he was defeated. (5) *The Great War and its Reaction*: McKenna duties of 33 1/3 p.c. in 1915 on cinema films, watches and clocks, motor cars and musical instruments were the first breach from the traditional free trade. The object of these was to relieve shipping, to secure revenue and strengthen the sterling exchanges but they were continued after the war and afforded substantial protection. The principle of Imperial Preference was applied immediately after the war by granting a rebate of 1/6 of existing revenue duties on imports into Great Britain of goods produced in Empire countries. By the Dye-Stuffs [Import Regulation] Act of 1920, special protection was given to the British dye-stuff industry by prohibiting imports except under licence. On the recommendation of the Committee on commercial and industrial policy after the war in 1918 that protection should be given to industries suffering from dumping of foreign manufactures and especially to Key or Pivotal industries, the Safeguarding of Industries Act was passed in 1921 which provided for protective duties on 3,000 articles of 33 1/3 p.c. *ad valorem*. It applied especially to such indus-

tries as were considered essential for national defence and industrial security—manufacture of scientific instruments, optical glasses, wireless valves, ignition magnates and certain chemicals. But in addition to the specified 'key' industries any industry was authorised to apply for protection of 33 $\frac{1}{3}$ %. Considerable powers were conferred upon the Board of Trade to protect home industries against unfair foreign competition and dumping due to the disparity of exchanges. These new duties represented important changes in principle but were applied to comparatively small range of commodities and industries. Until the time of the world depression the Mckenna duties, Safeguarding Duties and some of the revenue duties remained the chief departures from free trade. The safeguarding duties were applied at various dates to fabric and leather gloves, domestic glassware and pottery, incandescent gas mantles, lace and embroidery, cutlery, buttons, packing and wrapping paper and Revenue duties were applied to artificial silk, petrol and sugar. (6) *The emergence of Economic Nationalism*—There was a continued decline in the export trade since 1924 (£800 m. to £390 m. in 1931 and in volume

from 100 to 65.5). Imports fell in value from: £1,137 m. to £797 m. but in bulk increased from 100 to 116. They show increased consumption of food and raw materials and finished goods at lower rates and hence an advance on real wages and a rise in the standard of living. The deficiency of the visible balance was made up by the invisible exports—shipping, financial service, and interest on foreign investments. But the value of these invisible exports was declining—shipping freights were falling and New York was challenging London as the financial mart of the world. This led to the fall of the Pound and the suspension of the Gold Standard in 1931.

In the post-war period a strong wave of economic nationalism set in all over the world. An economic warfare and reprisals with new alliances and grouping of interests followed the war. Tariffs were raised and the Treaty of Versailles added thousands of miles of new tariff frontiers. The threat of dumping from countries with depreciated currencies was met by higher duties. The ideal of economic self-sufficiency and independence led to the safeguarding of infant industries. A vast increase in machine

industry in the Far East, especially textiles, with a tariff wall came into being. A large body of demobilised soldiers had to be provided for in industry, hence, a scramble for foreign markets. Every nation wanted to sell, none to buy. The attempt to liquidate war debts and reparations in the normal way (by export of goods) was frustrated by the action of U.S.A. and France in raising their tariffs.

This wave of economic nationalism swept England as well and the slogan 'Buy British' under the Merchandise Marks Act of 1926 was broadcast. But as England could not fulfil the policy of self-sufficiency owing to her inability to produce food for 40 m., the Empire was advocated as the self-contained unit which was to free itself from dependence on imports. An Empire Marketing Board was set up and a strong campaign in favour of Empire Free Trade or Imperial Preference was carried on. Manufacturers petitioned for their industries to be 'safeguarded' and 'anti-dumping' duties were imposed on a number of articles like fabric gloves, gas mantles, wrapping paper and lace. Colonial Preference was considerably extended. Silk and hop were also subjected to duties and the

list of key industries was enlarged. Thus the outer defences of free trade had already been breached at many points before the general attack began after the slump in 1930.

Reaction in other spheres:—Not only in respect of commercial policy, but almost in all departments of national life, the period witnessed a reaction against *laissez faire*.

It began in 1886 and has grown greater down to day. It is a well-known fact that ever since the sixteenth century England has been moulding her economic and commercial policy on that of some real or supposed rival. In the 16th century Spain impelled the English to develop some of their home resources. In the 17th century England moulded her policy on that of the Dutch; in the 18th century her model was France as reconstructed by Colbert, so much so that the 18th century has been called the period of 'Parliamentary Colbertism'. After 1880, the German model came before her and as Germany stood for State guidance and State intervention her reaction on England was marked.

The example of Germany however was not the only factor which led to the abandonment

of *laissez faire*. Other factors also were such that the intervention of the State became inevitable. There was a great depression in England in the preceding period as discussed above. Railway competition and, later on, railway amalgamations also required State intervention. Labour movements had come into existence; science had to be harnessed and health movements on a large scale had to be encouraged. But for State intervention, all these things would have been rather impossible. Hence, the abandonment of *laissez faire*.

The following is a brief account of some of the measures adopted by the Government under the influence of this reaction against *laissez faire*. They can be studied under several groups. The first group comprises *labour legislation*. In 1893 was passed the Shop Hours Bill and in 1894 the Early Closing Bill. In 1897, on the initiative of Chamberlain, the *Workmen's Compensation Act* was passed according to which accidents were made a part of the cost of production. *Unemployed Workmen's Act* was passed in 1905. Old Age Pensions were granted in 1908 and compulsory Unemployment Insurance was further elaborated. The Trade Boards

Act of 1909 made arrangements for fixing a minimum wage in the badly paid domestic trades; in 1908, the miners secured an *eight hours' day* and in 1912 the principle of minimum wage was extended to them also. On account of these the condition of labour improved substantially.

The *second* group of legislation dealt with children. In 1902 the Education Act was extended so as to include a technical training for the child. In 1906, meals for necessitous school children were made possible and School Advisory Committees were set up and Juvenile Labour Exchanges instituted to try and help the children into suitable work. Under the Child's Act of 1903 certain forms of street trading and night trading were prohibited to the children and in 1908 no child under fourteen was permitted to enter a public house nor was he allowed to smoke till he was 16. All the above regulations were based upon the assumption that the child cannot help himself and that he is really not a free agent. Some of these provisions were extended to females also on the ground of protecting the mothers of the future.

The *third* group of legislations deals with

Trade Unions, amalgamations and trusts. While factory acts envisaged women and children only, the trade unions helped to protect men. The unions were the masculine side of Factory Acts and were given greatly increased powers and wider scope in the period 1871-76. Under the Trade Disputes Act of 1908, their funds were made immune from what the law called Torts. The depression in the country, however, brought about an amalgamation of the employers also with the result that the work of Trade Unions was often rendered useless. To check this counteracting tendency, there came into existence the Labour Party in the House of Commons pledged to do everything for the welfare of the labourers. The rise of national trusts also made it necessary for the State to step in to prevent abuses.

The *fourth* group of legislation dealt with Agriculture. Here also the growing power of the State is to be marked. The free trade policy of England had proved disastrous to Irish agriculture on account of the American competition. A new policy, therefore, became necessary. In 1880, *fair rents* were fixed for a period of 15 years and in 1903 the Government assisted the tenant

financially to buy out his landlord. In 1899 the Department of Agriculture and Technical Education was set up in Ireland with the express purpose of inducing the Irish peasant to adopt improved methods. In England also the Board of Agriculture was created in 1889 to help stamp out cattle diseases and an elaborate system of agricultural education was developed. Efforts were made to develop small holdings by the increased powers of county councils (See section on Agriculture).

The *fifth* group of legislation dealt with the regulation of transport by *fixing rates and fares*. We have given a detailed account of this elsewhere.

The *sixth* group of legislation dealt with commerce. Here State intervention was rather less important. The action of the Government has been chiefly concerned with fighting unfair forms of competition. A Merchandise Marks Act was passed in 1887. Greatly increased attention was paid to adult training for commerce, and heavy expenses have been borne by the Government for the expansion of economic training and teaching. The Board of Trade started a Commercial Intelligence Department.

in 1900 which published a monthly journal containing trade news. The civil service was also recognised so as to make the above steps more effective.

The *seventh* group of legislation dealt with the extensions of municipal activities. To water and to gas many municipalities now added tramways and after 1880 electrical undertakings. Some of them undertook housing schemes as well in accordance with the Housing Act of 1890 and in 1894 the London authorities obtained a considerable extension of their powers in this respect.

In the *colonial field* also the extension of state activities became clearly well marked. With the coming of Joseph Chamberlain in office a new *Constructive Imperialism* was adopted. Inter-imperial cables were subsidised; postal facilities were enlarged, and trade commissioners were appointed to give information and to assist the development of inter-imperial trade. The United Kingdom thus gave her colonies a substantial financial preference in return for preference for British goods in the colonies. In the tropical dominions constructive imperialism took the form of subsidising

the building of railways in such regions as Uganda, West Africa and Sudan. In addition, the Government encouraged and subsidised the study of scientific agriculture in the tropics, tropical medicine and hygiene, and other subjects of economic importance to the Empire.

The adoption of protection, 193-32:—

What was the explanation of this change of opinion in England? In one word, the explanation lay in the post-war situation in Great Britain and in the world crisis of 1929. The war and the pressure of war needs shook the whole industrial fabric of England and put the world out of joint. War industries progressed and became more efficient; non-war industries were neglected and suffered for lack of capital and labour. The war caused the breakdown of the monetary systems of European countries. International trade was disturbed; British export markets were either lost or narrowed down; competitive industries developed in India, China and the Far East to supply local needs. Shipping was disorganised. In short, we may sum up as follows the various results so far as England was concerned and affected:—

- (1) After the short-lived post-war boom, the

world's commerce shrunk to below the 1913 level and as Great Britain was more dependent on foreign trade than other countries she was the biggest sufferer.

- (2) On account of shortage of shipping, neutral countries did their utmost to build up their own mercantile marines so that by 1928, while the volume of world's trade was little more than that in 1913, world shipping was 50% larger than before 1914. This meant a great blow to the British shipping trade and ship-building industry.
- (3) The British coal industry suffered heavily on account of the effort to economise in coal during the war, and the use of substitute fuels in the post-war years.
- (4) The impoverishment of countries that suffered from the war reduced purchases of British goods, particularly of capital goods like iron and steel goods and machinery.
- (5) The rise of new industries in the East reduced particularly the demand for

Lancashire cotton goods, and struck a deadly blow to one of the chief British industries.

((6) The rise of prices which soared to about 300% in 1920 over 1913, the reduction in hours of work and the rise in wages further impaired the competitive advantages of British industry.

((7) The simultaneous rise in the cost of living in England caused bitter labour discontent ending in the great Coal Strike of 1925, the General Strike of 1926 and many smaller strikes and industrial disputes.

It is not surprising, therefore, that the great basic export industries of Great Britain (coal, metallurgy and textiles) were in a very bad way throughout this period. They were in a stagnant condition and obliged to reduce production involving widespread unemployment in the chief industrial areas of the country. Indeed, Britain had never less than a million unemployed throughout and frequently over two millions. Financially, this widespread depression in the industrial activities of the country involved a difficulty to find money for the increased expen-

diture on social services or for reducing taxation and the burden of debt.

On top of this dislocation and deterioration of commerce and industry there came from 1925 onwards, and specially after the Wall Street crash of 1929, a disastrous fall of prices of raw materials and food-stuffs, and the consequent restriction of the purchasing power of all primary producers. Where this financial factor was not primarily so important, other factors such as anarchy in China and political unrest in India led to the same results. In 1930 imports into the United Kingdom fell by 13.8% and exports by 21.8 per cent. over the figures for 1929. The number of unemployed rose to $2\frac{1}{2}$ millions. Over 500 British companies showed in 1930 a decline in profits of 18%. Thus shrinkage of trade, unemployment and loss of profits combined thoroughly to shake the economic equilibrium of the country. The increased industrial activity that was apparent between 1924 and 1929 was again thrown back.

It is quite clear that during post-war years Britain had failed to maintain her place in international trade and to ensure even a reasonable prosperity to her chief industries. We may sum

up the causes of this incapacity briefly by saying that it was due to important changes in the nature of world demand of trades and the quality of goods in which she had specialized, to the rigidity and inelasticity of her industrial life, to her high costs of production, high wages and salaries, shorter hours, to increasing foreign competition, and finally to the post-war economic dislocation reflected in monetary and exchange difficulties, trade restrictions and tariffs. It was an inevitable consequence of these conditions that industry as a whole was working at a loss, and that the basic industries of the country could neither compete abroad nor resist foreign competition in the home market. Socially, further, this meant wide-spread unemployment in the industrial areas and consequent discontent, while financially, it meant a weakening of national finance and national credit.

When the crisis came in 1930, Britain was therefore forced in September, 1931 to go off the gold standard to stop the drain of gold, to close up her ranks and set up a National Coalition Government and to adopt drastic remedies to protect her industries and trade from ruin.

The new fiscal policy:—The National Government, soon after it assumed office in October, 1931, imposed duties ranging from 50 to 100 per cent. on a number of non-necessary articles to the extent of 30 to 40 million pounds sterling in value in the total. Foreigners engaged in some professions were barred out. On February 4, the Government proposed to impose a general tariff of 10% on all articles except those already dutiable or exempted. Duties were imposed on wheat. Goods from the colonies were to be exempt from the general duty permanently, and from the dominions temporarily until new arrangements have been made with them. A committee was to be set up for the purpose of giving advice and assistance to the Treasury in respect of the tariff. Mr. Chamberlain described the bad condition of trade and industry and pointed out the objects of his policy as follows:—

- (1) To correct the balance of payments by diminishing imports and stimulating exports;
- (2) To raise more revenue without unduly burdening any section of the community;

- (3) To prevent a rise in the cost of living through an unchecked depreciation of sterling;
- (4) To introduce a system of moderate protection scientifically adjusted to the needs of industry and agriculture;
- (5) To enable the country under cover of this protection to adopt more efficient methods of production and distribution;
- (6) To give the Government a weapon to negotiate with foreign countries; and lastly,
- (7) To enable the country to offer the Dominions commercial advantages in return for those which they may be willing to offer to England.

This policy was therefore the immediate result of the crisis. It was felt that without tariffs readjustment and reorganization was impossible. It did not meet with universal approval either in the Cabinet or in Parliament; but it secured overwhelming support in Parliament. Later, by other Acts wheat imports were restricted and duties were imposed on garden products, and in the interests of agriculture a comprehensive policy of organised marketing and

import restrictions was adopted. (See the section on Agriculture).

The Advisory Committee set up under the Import Duties Act of 1932 to consider the temporary duties imposed in October, 1931, recommended a whole series of additional duties upto 20% in all on a wide range of articles on the principle that since Parliament had decided to use the tariff to assist British trade and industry, their recommendations render possible an effective use of it. These articles were pottery and glass, furniture, a large number of iron and steel products, manufactures of timber and rubber, textile manufactures and clothing, paper, jewellery, toys and games, etc. etc. They recommended duties of $33\frac{1}{3}\%$ on certain other kinds of imports. Thus, about 57% of the total imports were to be taxed, and if duties of over 10% were regarded as protective nearly 70% of the trade in manufactured imports was to be taxed. This was to be over and above the natural protection that the depreciation of the pound provided in respect of imports from gold standard countries. The Committee further invited applications from industries seeking protection.

Towards the close of the year 1932 the Imperial Conference met at Ottawa and after prolonged discussions several agreements were entered into between England and the Dominions to prefer each other's goods. In this manner Chamberlain's proposals of 1903-1906 for a tariff and imperial preference have come to be adopted as the results of a continuing inability of British industry to bring about re-adjustments in structure and organization to meet the requirements of the new post-war economic world, and to meet the emergency of the crisis of 1929-30.

Moreover, a policy of fixing import quotas for commodities like bacon etc., of entering into exchange clearing and payment agreements and of exchange control under the Exchange Equalisation Account has been adopted in recent years. A justification of this changeover from free trade to protection lies in the recovery of industry and trade since 1933; but in spite of these crutches they have not been able to attain to their pre-war dimensions. Tariffs and other restrictions have increased the cost of living and led to demands for higher money wages and they have also spelt unemployment to some extent in exporting trades.
